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CONTENTS OF REEL 145

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- 2) Blooded stock, vol. 13
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- 3) Blooded stock, vol. 14, no. 1-9
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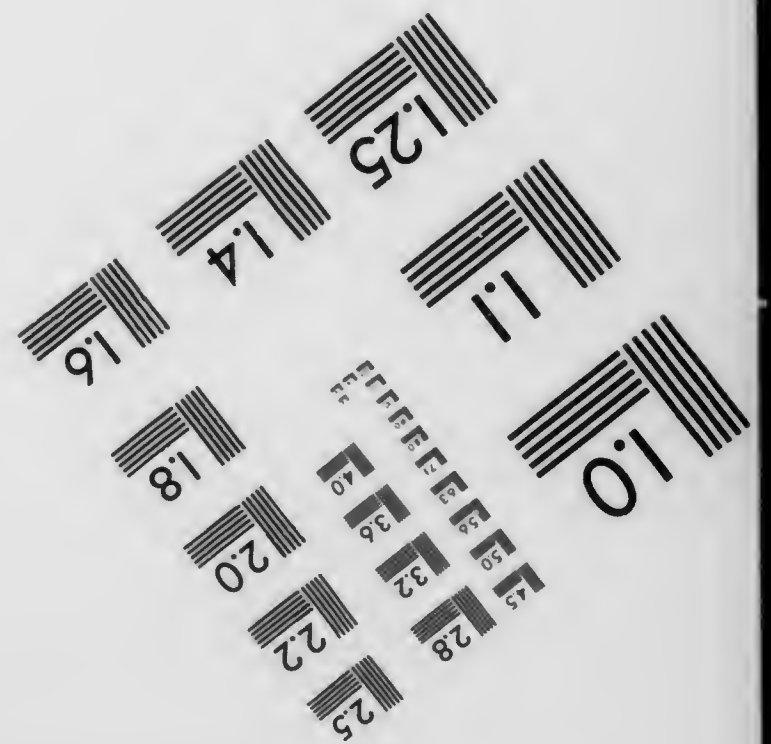
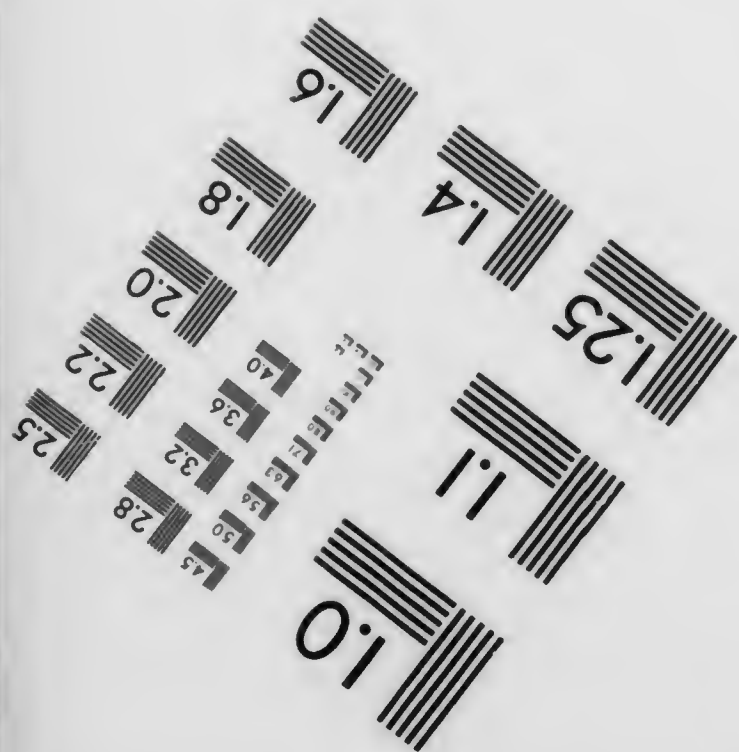
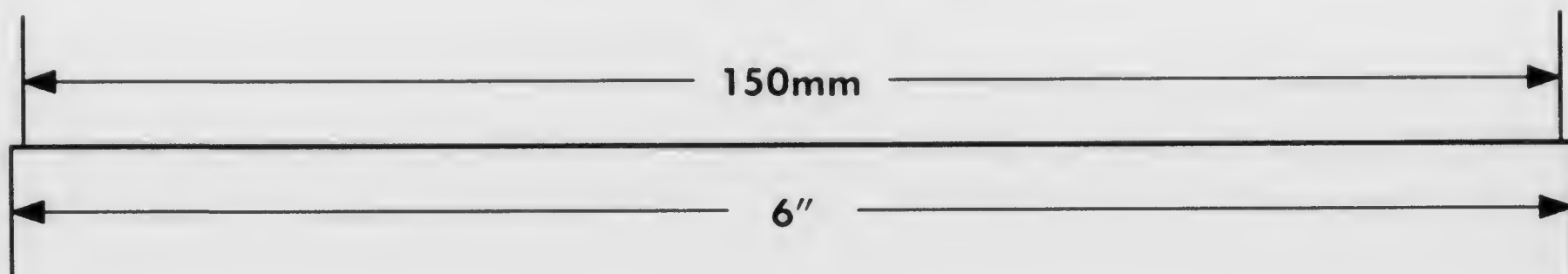
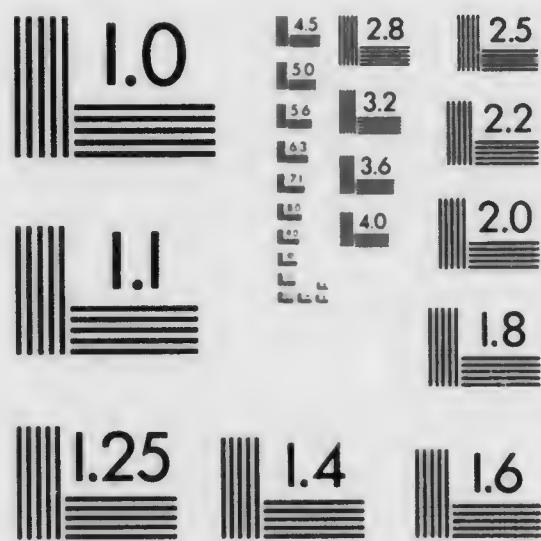
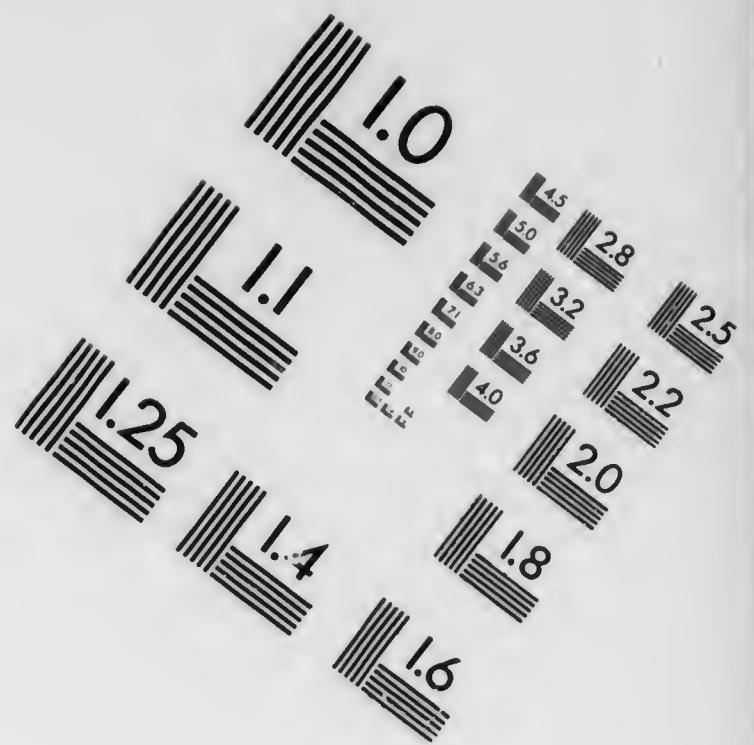
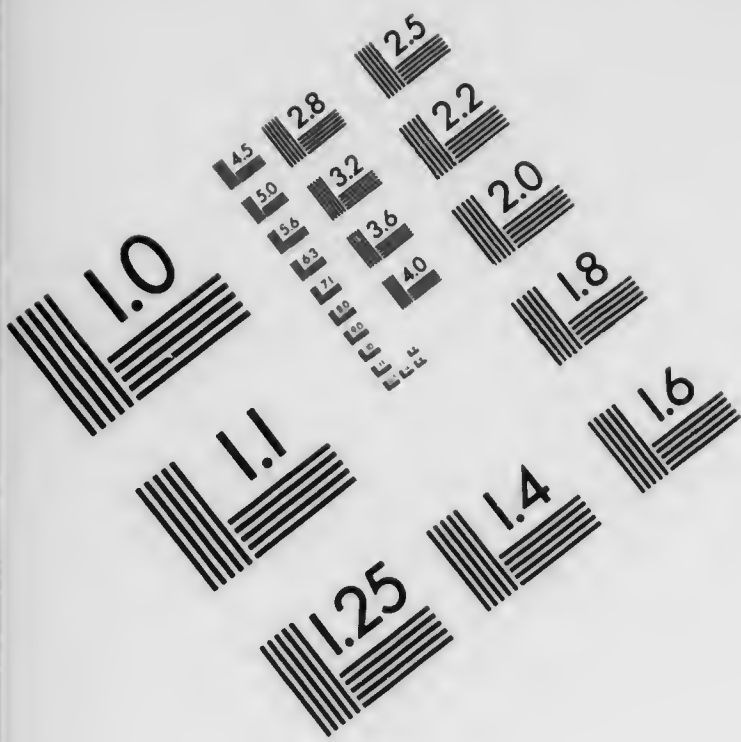
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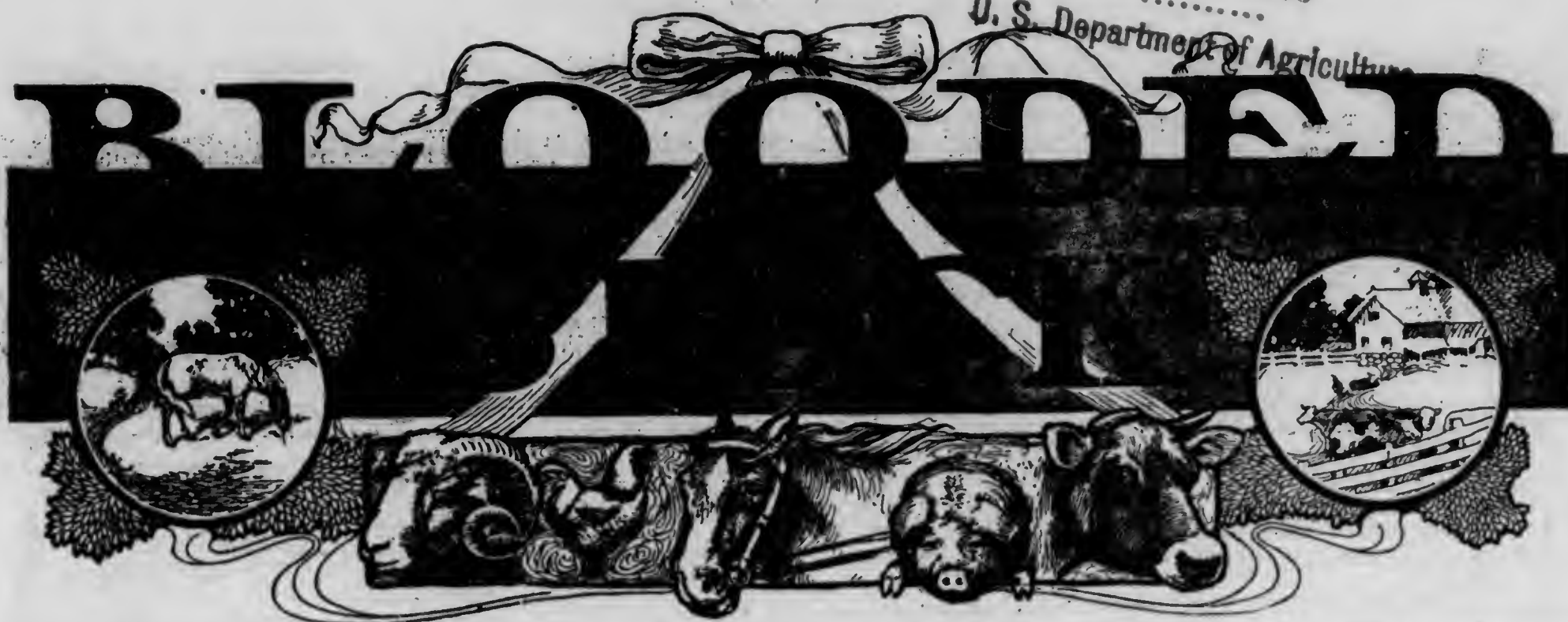
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VOL. XII.

OXFORD, PA., MARCH, 1906.

No. 1

ABERDEEN-ANGUS

By. T A. STEVENSON, Shannon City, Iowa

It is a broad and sweeping assertion, but I wish to say that nevertheless the assertion I am about to make is correct in every particular and no man who is posted and up-to-date on the cattle industry of America will try to deny. The assertion which I wish to make with regard to Aberdeen-Angus cattle is this, no breed of cattle in the United States are more prominent today, and no breed of cattle have won the honors and captured the Grand Champion prizes that the Aberdeen-Angus. No breed of cattle has or can furnish the "Market Toppers" that this breed has at the best markets of the World. Ever since their first importation in 1873. "No breed has had to run down such a barrier of prejudice as the Aberdeen-Angus. In fact, no breed was ever cast into a great beef-producing country under such unfavorable condition."

The scoffers have long since taken a back seat, and many of them are now admirers of the greatest "Market Topping" breed in the world.

It matters but little to breeders of Aberdeen-Angus of the present day, as to the true origin of the breed we know that they have been judiciously and skillfully bred and handled, until they now possess the well-established characteristics which they are able to transmit to their producer with almost unvarying certainty. Eighty to ninety per cent of the calves from common high grades of the other breeds come hornless and black in color. They cross admirably with all breeds, and when so crossed produce feeding steers which are much sought after, and steers that feeders of the West will pay from two to five dollars per head more for than steers of same weights of other breeds.

About thirty years have passed since their first introduction into the United States. In the thirty years they

have spread into about that number of States in that country No breed of cattle has spread as rapidly and gained such wide spread notoriety and high favor as have the cattle of this breed. The popularity and the superior quality of the Angus is recognized by the world at large. Even the staunchest supporters of the other breeds do not claim that their cattle will fatten and take on the fine finish and even

flesh, or be free from unsightly patches and pimples, as will the Aberdeen-Angus steers when subjected to the finishing process. The Aberdeen-Angus steer is the favorite of the Chicago and New York butchers two of the most exacting markets of the world.

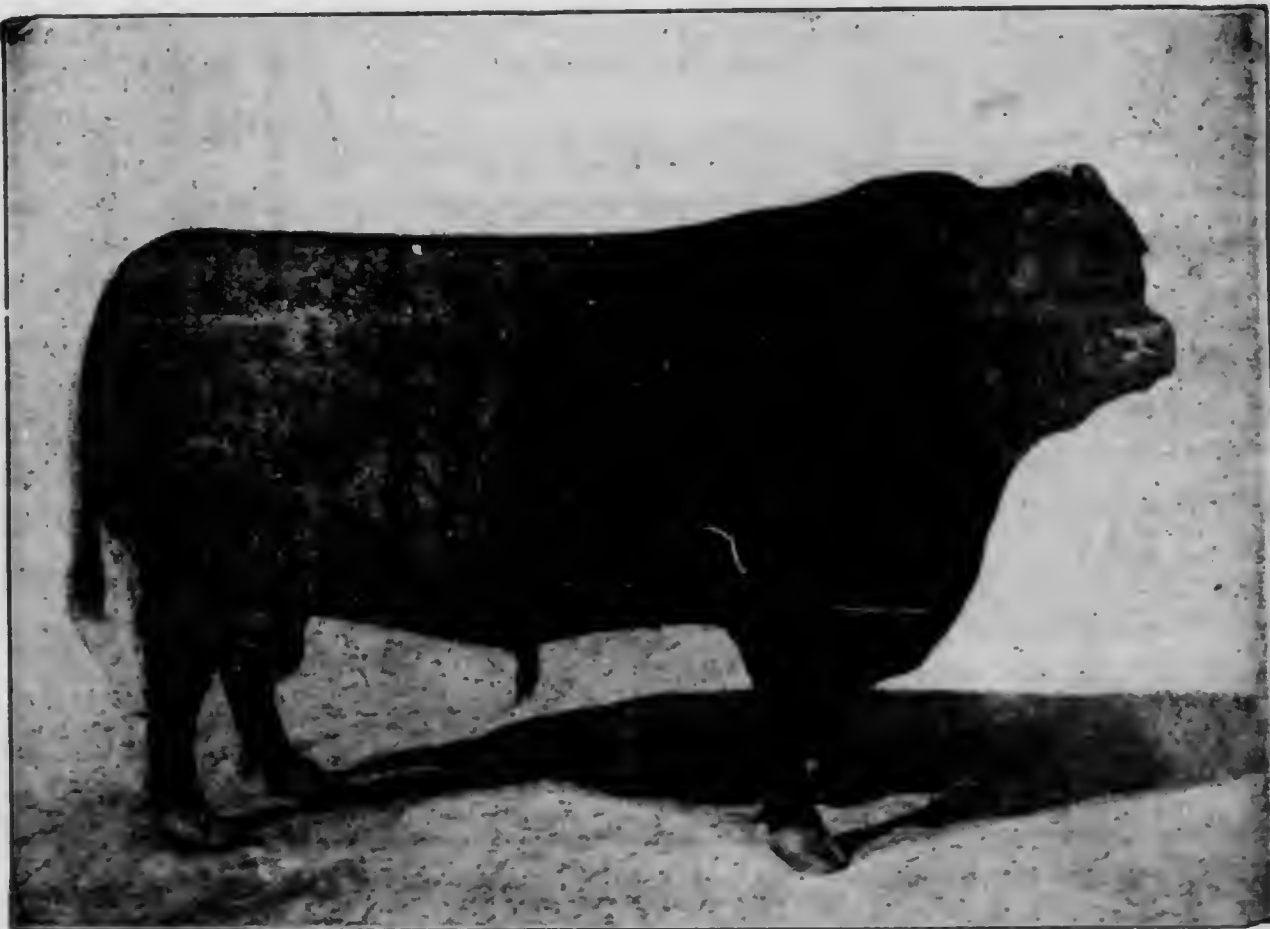
The important centers for the breed are Iowa, Illinois, Missouri, Ohio, and Indiana. Iowa one of the banner States of the Union, produces one-third of all the pure bred Aberdeen-Angus cattle in this great beef producing country of ours. Illinois comes next with one-fourth. Since the introduction of the breed in 1873 there has been about 87,000 recorded in the Herd-book, first volume of which was published in 1886 only twenty years ago. What other breed can show such a remarkable record in so short a period of time.

To Aberdeen-Angus breeders I would say: Stick to the breed, and let your watch-word

ever be improvement, if we expect to continue in the lead of all the other breeds.

I have great faith in pedigrees. The pedigree is as it were the title deed. The title deed to a worthless piece of land would be of little value. So the pedigree or title deed to an inferior pure bred Aberdeen-Angus male or female would in my judgement be of little value.

Individuality comes first and the pedigree is a secondary matter. As I said I have great faith in pedigree, and I



Polled-Angus for Steers.

Seventeen head of Polled-Angus steers fed by George Christy, of Illinois, sold on the Chicago market, had been on full feed for 245 days. At the beginning they averaged 925 pounds and when sold 1639 pounds. The feeds fed were ground corn and oil meal, with a little cottonseed cake. For roughage he fed corn stover and clover hay. He commenced feeding March 1 and fed lightly until March 15, when they were put on full feed. Mr. Christy says: "I use a sweep mill to grind the corn and cottonseed cake and then mix them together. Grind the cottonseed cake through the same mill. I turned cattle on grass May 1 and took them off 2 days before shipping." These cattle sold at the top of the market for the day.

FOR SALE-- Fine registered Duroc-Jersey pigs. Address Walter M. Carroll, Box 106, Lynchburg, Va.

Primrose Herd Large English Yorkshires.

From Imported Stock. Second to none. Write wants. A. A. BRADLEY, Frewsburg, N. Y.

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20 choice Spring Sows, open; 25 Fall Pigs, both sexes, and also some very fine yearling bred sows that are extra fine and were prize winners last Fall. 12 head Poland-Chinas from 8 to 12 months old. I never had a better offering in young sows than this.

C. R. CRESSMAN, Bursonville, Bucks Co., Pa.

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Farmers and Breeders I now have a large stock, probably the best I ever owned, thoroughbred Poland-Chinas and Chester White Pigs, 2 to 6 mos. old, sows bred, boars ready for service, all from prize winning stock. Guernsey and Jersey Cattle, Buff and Barred Plymouth R. Chickens. Farms and Residence, Greenwood, Pa. Address C. H. DILDINE, Rohrsburg, Pa. Route No. 1.

Bargains in Poland-Chinas, Berkshires & Chester Whites

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BLOODED STOCK

would not buy a male to head my herd unless the pedigree suited me. You cannot always rely implicitly on the ordinary pedigree, where simply the direct dams and sires are given. I personally am in favor of the tabulated pedigree and each and every animal is traced to the foundation or fountain head. And to make a good pedigree in none of the collateral branches should there be a stain or flaw. "Like produces like." My rendering of this would be "Like produces like, or of some of the immediate ancestors, occasionally harking back several generations. It is very important that the immediate ancestors be good, but a pedigree tracing say for ten or fifteen generations without a flaw or inferior animal is a much better pedigree in my estimation than one of inferior quality. A good individual with a record of inferior animals in the first three or four ancestors would in my judgment be a very poor animal to put at the head of a pure bred herd, or even to head a herd of grade cows of any breed, for the tendency is to hark back to remote ancestors, stamion or the throwing back seed to be a part of nature's laws. In closing this article I want to say the Aberdeen-Angus breed has many good qualities. First there are no horns to disturb and injure other animals, consequently more animals can be kept in a given space. They are "good doers" fairly good milkers, a great many of them extra good milkers and butter producers, the calves are strong and easily reared, mature early making ideal "Baby beef" and the "Market Toppers" wherever they go.

I have already made this paper longer than I should have done, but in conclusion I wish to say select the breed which you love best, buy the very best animals you can buy and keep everlastingly at it and you will make a success.

If you select Aberdeen-Angus cattle and handle them as you should they will prove money makers in your hands and your wife and babies will never go hungry. I am, Yours truly, T. A. Stevenson.

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BLOODED STOCK

BLOODED STOCK

FOR PRACTICAL STOCK BREEDERS AND FEEDERS

PUBLISHED MONTHLY AT OXFORD, PENNA.

UNDER EDITORIAL MANAGEMENT OF C. E. MORRISON.

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Selling an Aberdeen-Angus Steer for \$1.50 Per Pound.

One of the interesting events in connection with the International Live-stock Exposition, at Chicago in 1900, was the sale at auction of the champion Aberdeen-Angus steer Advance, to President Joseph, of the Schwarzschild & Sulzberger Company, for \$1 50 per pound, after a spirited bidding contest of half an hour.

Five thousand people packed themselves as near as possible to the sale ring and cheered from time to time as the sale progressed. In the crowd of expectant bidders were Nelson Morris, E. F. Swift, Siegel Hess, Meyer Myer, of New York, James Brown, Cal Leavitt, George Foale, Pete Duffy, John R. Harvey, William Russell, Louis Praelzer, James H. Ashby, William Mallory, Fred Joseph, E. Praelzer, Louis Keefer, T. Ingwersen, William Leavitt, and a number of others in prominent buying circles. The magnificent animal was the subject of much admiration, and before the bidding began prediction was freely made as to the price he would fetch, guessing ranging all the way from twenty-five to seventy-five cents a pound. Subsequent events showed how wild were the estimates made.

The Chicago Drovers Journal tells the story of the sale in the following manner:

Auctioneer Charles Judy, in beginning the sale, said: "Gentlemen, I am here to sell Advance, the greatest Angus steer ever bred, and the winner of the championship and the Drovers Journal silver cup. I will sell him per pound. Mr. Pierce, his breeder, makes these conditions: He must be slaughtered for 1900 Christmas beef, that he may not compete with next year's exhibit by Mr. Pierce. The exposition management stipulates that he must go back to the show until Saturday night, and Mr. Pierce agrees to care for him until next Monday.

Then the bidding commenced punctuated with cheers. Mr. Joseph made the opening bid at fifteen cents a pound. J. Miller, of Armour & Co., promptly offered twenty. The offers ascended the scale rapidly. It was New York against Chicago. Auctioneer Judy's eloquence was at times necessary, but the bidding was active.

"Hurrah for New York!" exclaimed Mr. Judy, when Mr. Joseph went Mr. Brown one better.

Steadily the offered price rose, the bidding being interspersed with such approving remarks:

"Hurrah for New York!"

"Don't let New York beat Chicago!"

"Hurrah for Joseph!"

Successive bids were fifteen, twenty-five thirty, forty, fifty, fifty-five sixty, sixty-five and eighty cents. Then the dollar mark was reached with a bid by Mr. Brown, amidst a tumult of enthusiasm. The bidding was between Nelson Morris, James Brown, of Armour & Co., and Mr. Joseph. The dollar mark having been reached, spectators awaited expectantly the termination, but Auctioneer Judy was not satisfied. His appeals met response, and the offered price still climbed higher. New York bid \$1.05, Chicago followed with \$1.10 and slowly it went up. The final bids were one of \$1.40 by Mr. Brown, followed immediately by one of \$1.50 by Mr. Joseph, who speedily became the owner.

"I think that's about the market price for him," remarked M. Greenwald.

When the result had been announced the air was rent with cheers. Auctioneer Judy called for a tiger for Mr. Joseph, and then a ringer for Stanley R. Pierce, who had sold the highest-priced beef steer in the world. This was liberally responded to.

The Aberdeen-Angus The Farmer's Steer.

From an address by W. A. Swain, Pendleton, Ind.

The Angus is the farmer's breed, and he does not have to be a millionaire to possess them. No unhealthy boom dominates the Angus sales. Good cattle sell at reasonable prices. The good ones are parted with reluctantly. Breeders do not consign their best animals to sales to create sensations, for they cannot afford to.

The Angus trade at present seems ruled by honest and safe business. So long as this healthy condition exists no man of reasonable ability need fear to start into the breeding of Angus cattle, in a modest way at least; for although the selling price is remuneration to the seller, I hope this condition of the business will always exist, for then the disastrous slumps will never overtake us. Should we get visionary and unreasonable in buying we will be forced to balance our accounts further on. The cattle supply is now ten million behind what it was ten years ago, but the population and taste for beef have been on a steady increase. Do you discern a cloud in the doddies' sky? While the feeder wants them, and the shipper, the buyer, the butcher and the packer all want them, for reasons of profit, what need we fear for the future? No other breed is furnished with such overwhelming proof of genuine quality, based on the market reports, as ours. I say stand by the doddies, but not lose sight of the fact that there are improvements to be made. Do not become oblivious in the heyday of success to the intelligent attention which the doddie himself demands of you as his patron saint.

Feeders are complaining bitterly in our community because it is such a hard task to get feeding cattle of quality near home. This is probably the complaint which is heard throughout the entire central West. The reason for such a condition is plain. Farmers who raise corn to feed do not generally have enough land to spare to raise their feeders also; and to keep the required number of cows and calves always on hand. Consequently they must go to the range for their steers or pick them up near home and take what they can get.

These are from milch cows, of course, add lacking in quality as feeders. The farmers themselves are not trying very hard to mitigate the trouble. They do not breed to the best bull in the neighborhood, nor do they keep a good bull themselves. The bull is usually a cross-bred fellow, and as a sire gets a motley crowd of calves, and unless conditions are unusually favorable the calves will inherit more bad characteristics than good, and so it continues year after year. If the farmers of all communities would grade up their cows as the ranchman is grading up his breeding cows, the trouble of our smaller feeders would find a remedy for itself.

Angus cattle have not been long among us. They are a new institution. They have points of merit which no other beef breeds have, nor will they have until breeders change their modus operandi and seek to produce an animal with the contour of the Aberdeen-Angus as a model.

"The best-bred and most vigorous parent is apt to exert a dominant power. Hence, intelligent stock-raisers are most careful in their selection of consistently bred sires, whose ancestors for several generations have exhibited the disordered character and qualities. Of special value are animals, male or female, which conjoin this prepotency with the good points sought to be produced. The likeness of the progeny to each of their parents is subject to other modifying conditions. The bony frame, the gait and the skin and its appendages notably follow the male parent, while the internal organs, the endurance and temper, more generally follow the female parent. This is illustrated in many cases where animals of different breeds or varieties are crossed. The progeny of the donkey mated with a mare exhibits the head, ears, tail, hair and gait of the ass in more marked prominence than when the stallion is put to the female donkey. Breeders of poultry recognize that the size, skeletal formation and plumage notably follow the male bird, while the production of eggs and the sitting habit more particularly follow the female."

Every butcher knows the detrimental effects upon cattle bruised by the horns of their fellows, and that a direct loss to the packer or butcher of from one dollar to ten dollars per head is a frequent occurrence from this source, not to mention the large aggregate loss to the producer and shipper where such damage is noticeable and detected before the cattle pass over the scales.—J. C. Dold, Vice-president Jacob Dolb Packing Company.

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ABERDEEN-ANGUS

By Meissner Bros, Reinbeck, Iowa

The Aberdeen-Angus or Angus or Dobbies as they are sometimes called, are comparative strangers to many farmers of the south and west. Many look with disfavor on the black cattle. Others confound the Angus with the Galloway cattle. The Angus are as different from the Galloway as the Jersey is from the Holstein. They are alike only in both being black cattle.

I want to give you a sketch of their early history, of their merits and superior qualities. They are preeminently a beef breed and as this have no equal.

The Angus are a native of Scotland. Their home being in the marshes and forests of Calendon, which is the north eastern part of Scotland. They are a lenial descendent of the horned cattle of those days. A part of these cattle, through some spontaneous organic change, threw off their horns.

We are without any authentic information as to the date of this organic change but it must have been more than one hundred years ago, probably two or three hundred years ago.

These cattle were first improved and bred up where they were originated. In 1837 Mr. Yonatt wrote: "There have always been some Polled cattle in Angus, the country people call them Humlies or Dotted Cat le."

The quietness, docility, the few losses that were incurred from injuring one another, the greater number of them that could be wintered in the same space, and their excellent feeding qualities, drew the attention of the breeders of Kincardineshire to these cattle about one hundred years ago.

At that time about half of the cattle in the Parish of Bendor at the extreme corner of Angus were without horns. This was about 1750. Long years of selection and breeding of the hornless cattle give us the Angus of today.

The first exact date of importation of this country is so remote that all dates have been lost.

The superior qualities of the Angus are apparent to every cattle breeder, shipper, stock buyer or butcher or pack ing house.

A bunch of Angus steers, half blood or better, always commands from twenty-five to fifty cents per hundred more than beef cattle of any other breed, even if equally well bred.

The reason of this is, they are easy feeders, always plump and round and like the Poland China hog always ready for market. They carry a maximum of the round, porterhouse, and sirloin stakes and a minimum of the cheaper meats and of fat.

The Scotchman tells us the meat of the Angus is unmarbled, that it is interlaid with fat, giving it a rich, delicious and juicy flavor.

An Angus bull will make a good cross on any breed of cattle, but from my observation the cross of the Angus or

Shorthorn will produce the beef cattle on earth.

A pure bred Angus bull bred to a pure bred Shorthorn cow, will give you a better steer than a pure bred of either breed. They seem to be thrifter, harder, have more vitality and grow faster if crossed this way.

If you use an Angus bull do not use anything but a pure bred bull. I have seen and raised lots of half blood Angus calves that were as handsome as the pure bred ones, but these will not do for bulls. While the Angus steers if half blood or better are the best feeders you can get. While if they are less than half blood you may find some very mean ones.

Let me say to the average farmer, those that milk from ten to twenty cows, buy good shorthorn cows or heifers and a good Angus bull, raise your Angus steers and have the heifers spayed. These steers and heifers will make you lots of money if you fatten them.

If you want to sell them as stockers you will experience no difficulty as buyers tumble over each other to get these cattle. In this way you can keep the same bull as long as you please. Every Angus heifer will buy from one and a half to two Shorthorn heifers of the same age.

Follow this plan and you will make one hundred and thirteen more out of your cattle than you can in any other way.

The Angus are great hustlers. Give them a half a chance and they are always fat. You have no dehorning. While the cash expense of dehorning a yearling steer or heifer is only ten or fifteen cents in cash, your steer or heifer will shrink several dollars worth while his or her sore head is heating up.

Do not take my word for the above, but look into this for your own benefit and you will find out from actual experience as I have done.

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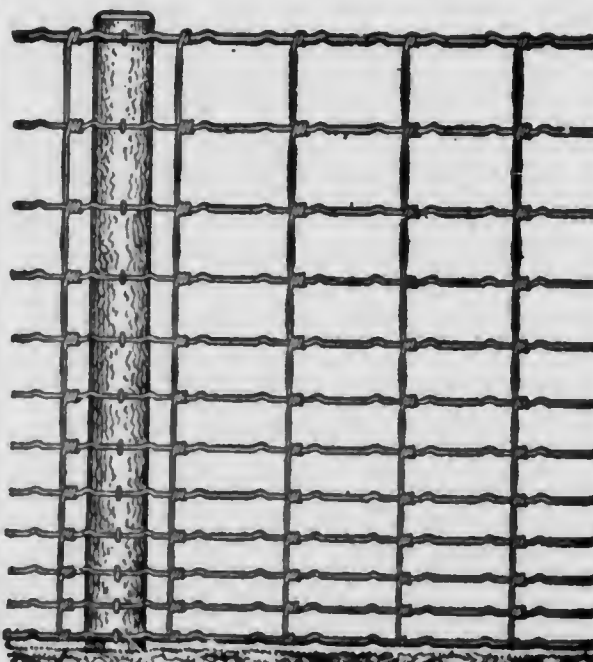
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Made of Steel. Lasts a lifetime. We have no Agents. Sold to users at Wholesale Prices. 7 cts. a foot up. Cheaper than wood. Catalogue Free. KITSelman Brothers, Box 97, Ellettsville, Indiana.

BROWN FENCE
AN EXTRA HEAVY FENCE
Every wire—both strand and stay—No. 9 gauge. Thickly galvanized. Best grade steel. We mail free sample for inspection and test. A more substantial, stock-resisting, time-defying fence was never stapled to posts. We pay freight on 40 rods. Write for book showing 110 styles. Brown Fence & Wire Co., Cleveland, O.
SAMPLE FREE
16 to 35 cts. PER ROD DELIVERED.

American Fence Talks

American fence is a structure of hard, stiff steel wires, possessing great strength and flexibility, adjustable to uneven ground, sound, durable and guaranteed. Great improvements are continually being made over the fences of years ago. See the modern, up-to-date American fence, built of big lateral wires, with heavy upright or stay wires hinged—the most perfect structure for a square mesh fence.

The thirty plants of the American Steel & Wire Co. make every known grade of wire, from the stiffest wire for pianos to a wire almost as soft as silk for weaving into wire cloth. With these enormous facilities for manufacture and observation of the action of wire in all kinds of service, not only is the best wire made for the use required of it, but for less money.



It is Steel that makes possible the great modern structures like bridges, skyscrapers, locomotives and steamships that people confidently trust. Steel for wire is specially made and becomes stronger and more durable by drawing into wire and annealing. And when thoroughly galvanized by latest improved processes and woven into American fence, makes the most substantial structure about a farm. Properly put up and treated, it is a permanent and money-making investment for many years.

We sell through dealers all over the country. In this way, the buyers' interests are best looked after. Dealer then becomes your business friend and he will see that you are treated right. See him, examine different styles, get catalogue and make selection to suit your requirements. Or, write us direct and we will send catalogue and tell you where you can get the fence.

NOT EXPENSIVE—Prices range from about 17 cents a rod up, according to height, style and location of your place.

American Steel & Wire Co.
Chicago New York Denver San Francisco

Mention BLOODED STOCK

A Telephone Book

To one not in constant touch with such matters it is truly astonishing news to learn at what a rate rural telephone lines are being built all over this country. A network of such lines is fast spreading all over the land, furnishing a means of quick communication to the farmer as well as to the dwellers in the towns and cities.

But many communities have not yet built such lines, and the farmers there are consequently shut off from the benefits and privileges their more fortunate neighbors enjoy. It is only a question of time, however, until every farm home will have its telephone. The farmer who hasn't connection now with a rural line will soon be taking the matter up with his neighbors and figuring how they can build a line to their farms.



For the benefit of all such we recommend that they read the book, "How the Telephone Helps the Farmer," published by the Stromberg-Carlson Telephone Mfg. Co., Rochester, N. Y. Besides enumerating all the practical advantages the telephone offers the farmers

and his family, it tells how to go about it to interest your neighbors with you in building a rural telephone line; how to organize the company, giving blank forms for constitution, by-laws, etc.; how to select and buy the proper equipment, with a chapter on the probable cost cent per mile to construct the line. In fact, the book is full from cover to cover with helpful, practical information the farmer cannot get anywhere else, and makes the preliminary work of getting a telephone line perfectly clear and easy. The same com-

pany publishes several other books you will want. If you are interested they will send them all to you free, and will assist you in every way they can to organize your company and build your line properly, so that it will not only be a success but a benefit to every one on the line. Write to-day for the book, "How the Telephone Helps the Farmer," and tell them what you are doing and what you expect to do,—they will give you expert advice which will make the work easy for you. It will only cost you a stamp to write for it, and may save you several hundred dollars when you come to build your line. Mention Blooded Stock.

The Brood Sow

Through the northern and cold state, the critical time for the brood sow is at hand. Exercise in many cases is difficult to provide where yards and pastures are drifted full of snow, but exercise is necessary and must be provided in one way or another. Turn them in the barn yard for several hours daily while the weather is good.

See that they have a variety of feed. Turnips, roots or hay are frequently fed and are very good. We feed a small feed of corn twice daily with a good swirl of ground oats and wheat and shorts (oats and wheat we grow together) also twice daily, as we get along within four weeks of farrowing time we increase the swirl slightly and add a little oil meal starting with a very small amount and increasing it until a small hand full to each sow of four or five hundred pounds is fed twice daily. Gilts in proportion to weight. Care must be taken not to increase swirl or oil meal to rapidly or you will cause abortions.

This is very important and will always insure easy farrowing of healthy pigs. You will not need a forcipis to take the pigs from the sow. We have been feeding this way for 15 years and in all that time never had to take a pig

from a sow or a sow farrowing, but had considerable loss and trouble before we found this out.

We do all kinds of Job Printing. Send us your work, it will be promptly done. Write us about it.

THINK OF IT! An Enlarged Portrait, Framed, for 55 cents. Write for terms. Life is short! Do it now! NATIONAL PORTRAIT CO., Chicago, Ill.

Farm Telephones

How they Help the Farmer

If the telephone really helps the farmer he is the man who ought to know the "how" and "why." We have recently published a book full of telephone facts for farmers, which every farmer in the country ought to read, whether he intends to buy a telephone or not. It will be sent FREE to all those interested who will take the trouble to write for it. This book tells how and why the telephone helps the farmer and his family, and why the modern farm equipment is not complete without a telephone. The telephone is a time-saver—consequently a profit-maker. Simply reading this book, "How the Telephone Helps the Farmer," will certainly convince any farmer that he is missing much he ought to enjoy if he is trying to do without a telephone in his home. It describes very interestingly the best telephone for the country home—

Stromberg-Carlson Telephones

Tells just how each part from the case to the most important part is made; illustrates the various parts and shows by a very practical and complete description and explanation the duty and requirements of each; tells why we make them with such care, and exposes the secrets of the construction of cheap telephones; shows why they can be sold cheap, and why they should never be used on farm lines. It shows why Stromberg-Carlson telephones will outwear any other farm telephone made and how we produce an instrument that practically will never get out of order. Cheap telephones are invariably out of service just when you want them most; they quickly lose their talking qualities and are a constant source of annoyance and expense, simply because they are not made right. The principle of operation is just the same in a cheap telephone as in a good one—the difference all lies in the construction, the better materials used, and the greater care and skill employed in the making. We would like to have you read this book. Simply drop us a postal card asking for 146G, "How the Telephone Helps the Farmer," and we will send it to you by return mail. Do it today before it slips your mind.

STROMBERG-CARLSON TEL. MFG. CO.
Rochester, N. Y. Chicago, Ill.



The Binder YOU Want
Why? Because it does the work just as you want it—just right. It cuts, reels, elevates and binds any kind of grain on any kind of ground; handles down and tangled grain perfectly and is light in draft. It represents 25 years of experience in binder building and practical use in the field. That proves the

JOHNSTON CONTINENTAL BINDER

is not an experiment. As practical use has suggested improvements, they have been added—then tested—then perfected—until we have produced a binder THAT DOES THE WORK RIGHT. WHY? Because its elevators can't clog—they're self-adjusting to light and heavy grain; its knotters are gear driven—never fails to work; reel is gear driven and adjustable to all conditions; levers are all right-hand; all canvasses have tighteners with wood bearing boxes that can be easily replaced. Send for our free catalogue and get ALL the good points—reasons why it is the binder to buy.

THE JOHNSTON HARVESTER CO., BOX 816, BATAVIA, N. Y.

Ties every bundle without waste

Continental Elevates all the grain without waste

MILK FEVER EASY TO PREVENT

By J. H. NELLIS, Paterson, N. J.

Milk in New York and the adjacent large cities brings six to twelve cents per quart and the large output of brewers' grains, the high price of land and small size of farms make it necessary to "push" cows to the limit of their capacity.

Experience among this class of dairymen has led nearly all to the same procedure, viz., they purchase fresh cows, milk them as long as they show a profit, when if healthy, they are fat and go to the butcher.

The writer was born and lived till forty-nine years of age in the Mohawk Valley, central New York. He had had no experience with milk fever. Had heard of cases, generally in early summer, and never had seen more than one case which a neighbor had abandoned. This case as we now realize, was not a bad one. She rested on a bed of straw on the barn floor, was covered with a blanket and straw. The writer suggested large doses of aconite which were given at intervals. A veterinarian said later that the aconite should have killed her, but finally she stood up and proved useful again.

During the writer's boyhood, the product of the dairy was manufactured into cheese on the farm. The cows freshened in March, April and May and were dried off in November and December. During winter these cows were fed dry corn stalks, oat straw and hay and some grain before and after calving. Milk fever was milked off and these cows produced enormously especially when turned upon the luxuriant pastures.

In December, 1890, the writer moved to a farm near Paterson, N. J., bringing also a herd of selected milkers, not a few being high grade Jerseys. During the first winter, hay and the usual concentrated dry feeds were used and the cows responded generously.

Then to "follow suit" or more properly do as many of the others did, we began to feed wet brewers' grains brought by carloads from New York. For a time these grains seemed economical and they were fed from Nov. 13, 1900, until Dec. 1, 1901. Ensilage and some hominy and bran were also fed, also a little linseed oil meal. In addition to scant pasture, soiling crops of green rye, wheat, oats and peas, clover, corn, barley, turnips, etc., were fed in season.

During this period the cows milked generously but were thin in flesh. Throughout the entire season the rainfall was constant and copious. In fact this was the wettest summer ever remembered by the writer.

Referring to a dairy we find that during seven weeks in Dec., 1900, 6,600 pounds of wet brewers' grains was consumed in addition to ensilage and other feeds. The ration of dry fodder was scant, as the supply was short. The ensilage fed during that winter was moist, much of the corn being rather immature and one silo was roofless, allowing the heavy rains and snows to fall upon the ensilage.

About thirty-five cows and a few young cattle were fed during this period. Referring again to a dairy we find that cow No. 23, deep red, about ten years old, dropped a calf April 12, 1901, and soon developed symptoms of milk fever, little was done to save her for our scant knowledge precluded prop-

er treatment. She died the following day.

No. 18, light red and white, grade Jersey, five years and seven months old calved July 25 in the woods in early morning, was brought to the stable during the forenoon. Symptoms of milk fever developed July 27. We injected one fluid ounce iodide of potassium diluted in fifteen ounces of water

into the udder. She seemed 'to slightly improve but died Aug. 30.

Before and after this case we read and studied all literature on this subject within our reach. We had bulletins from New Jersey, Maryland, Washington, D. C., and elsewhere but could not learn the real cause of the trouble.

No. 9, brown and white, eight years old, dropped a bull calf Oct. 9, and on



Washed in 1 minute

Count the pieces—notice the difference—and you'll understand why the one who has to do the cleaning prefers the simple Sharples Tubular.

There are other advantages just as much in favor of the Tubular. Write today for catalog V-300—it tells you all about the gain, use, and choice of a separator.

The Sharples Separator Co.
West Chester, Pa.

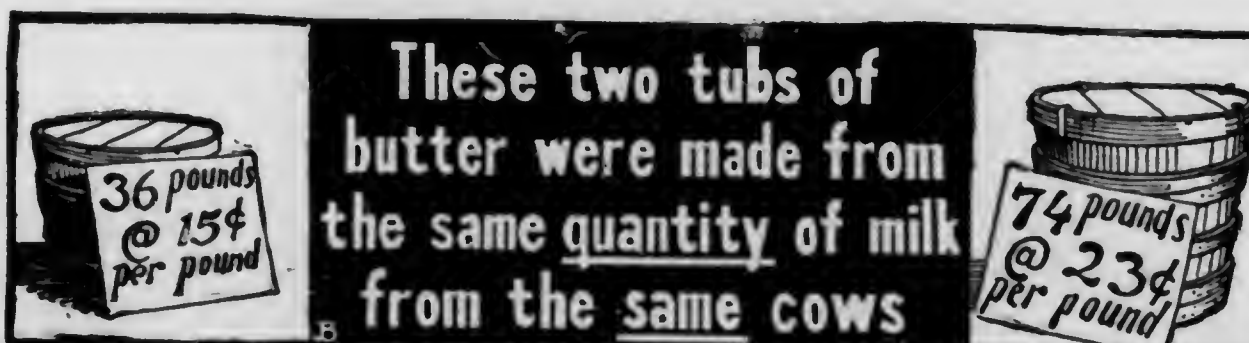
Toronto, Can. Chicago, Ill.

A Big Difference

One Minute's Washing as compared to at least fifteen. Wouldn't you like to save at least fourteen minutes twice a day? One minute with a cloth and brush cleans the absolutely simple Sharples Dairy Tubular Cream Separator bowl shown in the upper picture. It takes fifteen minutes to half an hour with a cloth and something to dig out dents, grooves, corners and holes to clean other bowls—one of which is shown in lower picture.



Washed in 15 to 30 minutes



These two tubs of butter were made from the same quantity of milk from the same cows

How was it done?

Here's the story in the words of a plain, honest, hard-working farmer and his wife.

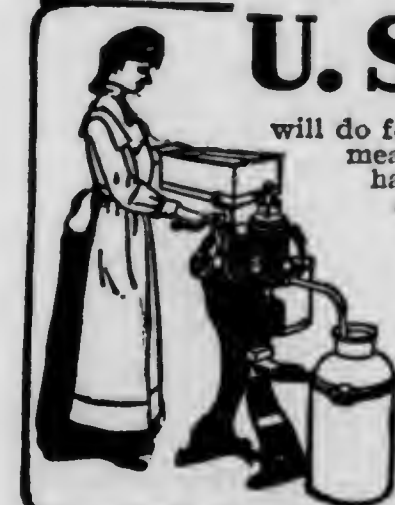
RAYMOND, NEBR., June 6, 1905.

We had a water separator, and from twelve cows we made 36 lbs. of butter. The next week we used a No. 6 U. S. Separator and made 74 lbs. from the same cows in the same pasture without any extra feed. We made \$10.45 the first week after using the machine. We are very much pleased with it, and could not do without it now.

JOHN NEYLON,
MRS. NEYLON.

Are you using any gravity method to skim your milk? If you are, a

U. S. Cream Separator



will do for you what it did for the Neylons. Think what that means—a considerable daily saving in the time and work of handling your milk—from $\frac{1}{4}$ to $\frac{1}{2}$ more butter than you are now getting, and better butter, too, that brings a higher price. You can't afford to put off looking into this matter another day—write us now for a free catalogue, which explains just what you want to know.

VERMONT FARM MACHINE CO.
Bellows Falls, Vt.

Eighteen Centrally Located Distributing Warehouses throughout the United States and Canada 427

What The

WORLD'S BIGGEST USERS

Have to Say About

CREAM SEPARATORS

Lincoln, Neb., December 4, 1905

Our separator experience dates back about ten years. At that time the De Laval separator was already recognized as the best machine; though its superiority was not quite so fully established as it is at the present time. In those earlier days, through the purchase of other creameries in which the machinery was already installed, we had opportunities to use various other makes of separators; however, none of them did the work as well as the De Laval, either as to capacity for clean skimming or ease and simplicity of operation.

Before the advent of the hand separator the Beatrice Companies operated between five and six hundred De Laval power separators and there were many instances where our experience led us to deliberately replace some other make of machine with a new De Laval, paying good, hard earned money for same.

There is no disputing the fact that the De Laval power separator is a better machine in every respect than any other make. Since the hand separator came into general use in this western country we have had further opportunity to make comparisons and in our opinion there is no other machine as yet manufactured which compares with the De Laval in capacity for skimming, clean skimming, ease and simplicity of operation.

The large "Alpha" De Laval machines we owned and operated in years gone by have practically all left our territory, having been sold as second hand machines to creameries in the East where the whole milk system is still flourishing, but to replace these larger machines we have in the past five or six years, sold to farmers throughout these western states and territories approximately thirty-five thousand DeLaval cream separators which are operated by hand or tread power.

BEATRICE CREAMERY COMPANY,

By W. F. Jensen, Secretary.

If the above is the kind of experience you would profit by a De Laval Catalogue and any desired particulars are to be had for the asking.

The De Laval Separator Co.

Randolph and Canal Sts.
CHICAGO
1213 Filbert Street
PHILADELPHIA
9 & 11 Drumm St.
SAN FRANCISCO

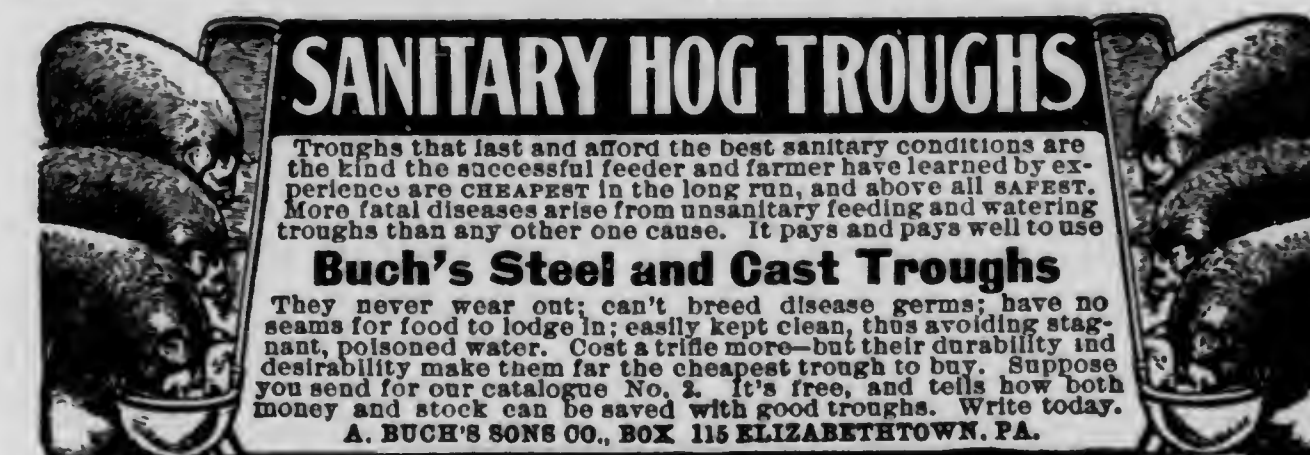
General Offices
74 Cortlandt Street
NEW YORK

109-113 Youville Square
MONTREAL
75 & 77 York Street
TORONTO
14 & 16 Princess Street
WINNIPEG

cow and the inversion followed.

The present dairy cow, through many generations of selection and stimulative feeding is an abnormal creature, especi-

ally is this true of a good cow in the prime of life. During the last weeks of lactation and the period before calving (concluded on page 10)



SANITARY HOG TROUGHS

Troughs that last and afford the best sanitary conditions are the kind the successful feeder and farmer have learned by experience are CHEAPER in the long run, and above all SAFEST. More fatal diseases arise from unsanitary feeding and watering troughs than any other one cause. It pays and pays well to use

Buch's Steel and Cast Troughs

They never wear out; can't breed disease germs; have no seams for food to lodge in; easily kept clean, thus avoiding stagnant, poisoned water. Cost a trifle more—but their durability and desirability make them far the cheapest trough to buy. Suppose you send for our catalogue No. 2. It's free, and tells how both money and stock can be saved with good troughs. Write today. A. BUCH'S SONS CO., BOX 115 ELIZABETHTOWN, PA.

BLOODED STOCK GRASS CULTURE BY GEORGE M. CLARK

Ladies and Gentlemen—I am here to talk mostly about grass culture, not as an orator with fine words, but as to a poor farmer's boy who was raised upon a New England farm with his father and grand-fathers. The grand-fathers were large land holders and were land poor, which is the case with most farmers in New England or elsewhere. I know very well what the fathers did and what the general farmer of today is doing. The fathers did the best they could with the tools they had to use. We now have better tools and can do better work. I do not undertake to tell you how to do everything or to talk of all creation, I wish to confine myself mainly to my methods of grass culture together with what I have found necessary to make it a success. First, intense cultivation is absolutely necessary to make a large hay crop or the largest crop of any kind on the farm and also I have found what we must do to make money on the farm. Without higher cultivation we can now make money, but for a moment we will consider our present conditions.

Early in the 80's the State of Connecticut organized what is now known as Storrs Agricultural School, the general assembly appointed a committee to arrange details. I was one of that committee. These schools are good, they employ scientific men who do all they can to cover the entire field of agriculture. Our State is doing a good work. Other States are also doing well, they are hand in hand in this great work. The facts are that we get from the soil most of the material upon which we subsist, all except a few fish.

It requires a great army of workers, but it is not necessary for all to be scientific men or women, but it is important for all to do the work in a scientific manner. The States and general government are employing the best and most scientific people that can be found to instruct the rising generation in agriculture. What we most need is to show the young men and women, the boys and girls that they had better stay upon the farms, that they can make money there and when they find that fact they will stay there.

But first, I want to tell you more of the reasons why eastern farmers or others should stay here and learn to make their farms pay. To start with, one-third of this country is a dry, barren waste, 1400 miles wide in the South, 500 miles in the North and 1700 miles from South to North, an immense desert, central in which we find the great Death's Valley, so called, where so many have perished for want of food and water. Hundreds of families have sold themselves out of a good house, home and farm, leaving schools, churches and everything behind that makes life desirable in this eastern country and loaded all their effects into a wagon to cross the plains, a little later we find them in a dug-out, 7 x 9, made of brush, four feet above ground and three feet below, eking out a miserable existence among the tarantulas or worse with their bones stripped by the buzzards on the plains.

A short time since there was a great cry made about the good government lands which were to be obtained along the Colorado River, it was said to be a

fine clean section for irrigation.

One party from San Francisco, who had traveled there, said that he knew it to be true, that the land marks in that section were made by the bones of those who had fallen in that desert waste where nothing can live but turkey buzzards. We often read of it, but the western cryer is mum. But few will tell you the facts about the far west. There is little or no chance for the poor man there, the horse has the first chance and the laborer the second chance in the barn. I only wish you to get some of these facts, in your mind before you sell out. I know what I am talking about, have often been there, have traveled over seven hundred thousand miles on this continent to learn of the soil, climate and surroundings and I want to tell you for a fact that I never saw or found any spot equal to this well watered good eastern country. I do not think you can find any better. I would advise you not to try. Why not let "well enough" alone, you have "well enough" right here. You have a well watered country, perfect drainage, good air, climate correct, it will produce the best health and greatest activity for man or beast.

Our markets are world wide. All we want is to avail ourselves of our opportunity. The "get rich quick" theory won't do, we must be content to do what past generations have done. We must begin at the bottom and build up. As a rule those who commence at

the top build down and out. Economy is wealth. We must live within our means. It is not the amount we get, it is the amount we save. The hundred thousand dollars that the fathers now have was the work of a life time. We must learn to work, not all work and no play, but work with body and soul in reason. That is what will make us happy and nothing else will. Life is too short to do any fooling. I do not suppose the day of the millennium is at hand yet or that all will learn to love work, mentally or physically, or that all will save money. Many are not built that way, very many want always to be, not on the moving from one section to another. We now find a great moving north, east, west and south. All the good land is taken in the west, it is held at high price, \$50 to \$100 per acre or more with a market a thousand miles away.

While in the east with a market at our door and with land not one-tenth as high, is there any sense in saying we cannot make money here on the farm? No! I am going to tell you how to make money on an abandoned New England farm. My farm contains 50 acres, I subdue only 16 acres, a 30 acre farm, well cared for is big enough. A portion of the 16 acre field was flat, cold, wet, clay gravel hard pan, partly covered with rocks, some ferns and brush with little vegetation on the surface. To start with a sharp pointed

(continued on page 15)

THE DUROC - JERSEY IS AT THE TOP

and there to stay. Write us and we will give you the facts that will convince you. We have the blood of Orton, Ohio Chief (recently sold for \$2700.00), Sensation, Sure Winner, Topnotcher, Kant-Be-Beat, Protection, Longfellow, Washington King, Go-Forward, Fayette Chief and High Chief, besides a string of other leading Western Winning Strains, the very cream of Duroc-Jersey Breeding. Our prices are low and the quality is high. We can save you money. Write at once and we will give you some Duroc Facts.

LESLIE D. KLINE, - - VAUCLUSE, VA.



The above Champions and Sweepstakes Boars represented in my herd.

Sows bred to the Great International Champion, Top Chief, to be sold at Public Sale at Disko, Ind., on March 27, 1906.

Write me if you want pigs by the greatest boars in the world. Send me your name and address and I will place you on my mailing list and you will then get my sale catalogues. Any bids sent S. G. Essig, Sale Clerk, Silver Lake, Ind., will be honorably handled for you.

LINC LUKENS, DISKO, IND.



ARE YOU READY FOR HARVEST

How about it?

Old Mother Earth, the sun and the showers, the dews and the winds are doing and will do their part to produce the wheat and oats and rye and barley that go to make a bountiful harvest.

Are you doing your part?

Are you getting ready to harvest the crop after it is grown?

Do you know how you will cut your grain?

Are you sure you will harvest it to the best advantage—with the least loss of grain, the least waste of time, the least trouble and worry and expense?

These are mighty important questions, for a large share of your profit depends upon them.

It's not too early to begin to think about them.

With high priced land and high priced labor, you need to get every cent from every acre you cultivate.

Help will be scarce and expensive; therefore, you need a harvesting machine that will save you the most labor.

Harvest days are few; therefore, you need a harvesting machine that will save you the most time.

Grain is worth money, therefore, you need a harvesting machine that will save you the most grain.

You can't afford to run risks.

You can't afford to take chances.

And you don't have to.

Take an hour or two, now, before you get too busy and talk to any agent of the International Harvester Company of America, and find out about the international line of harvesting and haying machines for 1906.

You'll be interested whether you buy or not.

Buying a machine of any kind for use on the farm is not as simple a matter as it may seem.

You can "size up" a farm and know pretty accurately how much an acre you can afford to pay for it, but unless you are a mechanical expert you can't judge a machine in the same manner.

You have to take other things into consideration.

For example, You need to know something about the design—the mechanical principles—how the machine works.

You need to know something about the materials used in it.

You need to know something about the skill used in its construction.

You need to know something about the responsibility of the man behind it and about the machine's reputation.

The International Harvester Company line of machines for 1906 will satisfy you on these points—and on every other point that you may bring up.

Bigness is not necessarily a merit in itself.

If you're buying a horse you don't care very much whether the man who raised it, raises one colt a year or so.

But you know that the man who makes a specialty of horse raising is more likely to raise a hundred good colts, than the man who goes at it in a hit-and-miss, haphazard manner.

It's the same way with farm machines.

You don't care whether a manufacturer makes 1,000 or 100,000 of them, just so the machine satisfies you.

But there's this to take into account:

The first harvesting machine was largely an experiment.

For fifty years inventors and manufacturers continued to experiment, making changes and improvements, adding this and taking away that, until finally a half-dozen harvesters began to stand out head and shoulders above the others.

Why do you suppose that was?

How did it happen that the Champion, the Deering, the McCormick, the Milwaukee, the Osborne and the Plano increased in popularity and sales so much more rapidly than the hundred and machines that have been put on the market at various times in the

past 50 years?

There is only one reason for it.

They met the demands of the farmer, and satisfied his needs.

In the expressive language of the day, "they made good". They are better today than ever before: they do better work and give greater satisfaction.

And here are the reasons:

1st.—

The mechanical principle is right.

The manufacturers of the Champion, the Deering, the McCormick, the Milwaukee, the Osborne and the Plano, by co-operation are able to include in their respective machines every device, every invention, every mechanical principle yet discovered that tends to make a harvesting machine do better work.

By co-operation they are able to maintain such experimental shops as the world has never seen before, making certain that every improvement and every device that mechanical genius can contrive will be employed in their line.

2nd.—

The materials are right.

By co-operation they are able to own, control and operate their lumber camps, their own saw mills, their own coal and iron mines, their own coke ovens, their own steel mills, relieving them of the necessity of depending upon the uncertain and fluctuating steel markets, coal markets, lumber markets, etc., for their raw materials, and insuring them at all times an abundance of materials

which they know to be right. These are added reasons for the superiority of these harvesting machines.

3rd.—

The workmanship is right.

The demand for these six leading makes of harvesting machines enables their manufacturers to maintain manufacturing plants of the highest efficiency and to employ workmen of the highest skill—factories and workmen which could not by any possibility be maintained to supply a small demand.

4th.—

The reputation is right.

The fact that so many farmers cannot be persuaded to buy any other,—the fact that so many farmers continue to buy them,—the fact that they are considered the standard wherever grain is grown in every part of the world is sufficient indication of their reputation and their reliability.

You probably need one of these machines.

You cannot afford to begin harvest with a machine that is liable to break down and cause you several days delay.

You cannot afford to use a machine that loses a few stalks now and then and a whole sheaf here and there, for a little leak like that eats into your profits at a surprising rate.

Go to the dealer now, and get which ever catalogue you want like that eats into your profits at a surprising rate.

If you don't know an International Dealer—write to us for the name and address of one nearest you.

INTERNATIONAL HARVESTER COMPANY OF AMERICA, (Incorporated) CHICAGO, ILLINOIS

International Line—Binders, Reapers, Headers, Header-Binders, Corn Binders, Corn Shocks, Corn Pickers, Huskers, Shred-ders, Corn Shellers, Mowers, Hay Tedders, Hay Rakes, Sweep Rakes, Hay Loaders, Hay Stackers, Hay Balers, Knife Grinders, Gasoline Engines, Pumping Jacks, Manure Spreaders, Weber, Columbus and Bettendorf wagons, Binder Twine.



A Pair Squealing For
O. I. C. Food

Milk Fever Easy to Prevent

all the organs that produce milk should be soothed and rendered dormant, not by feeding milk-producing foods and those containing water, but rather by feeding timothy hay, corn stalks, oat straw, corn meal, bran and flax seed meal just before calving, never allow such a cow to gorge herself upon rich, fresh pastures, soiling crops, turnips, brewers' grains or sloppy foods of any kind.

Stop to think; a cow's machinery is adapted to appropriate water from her food, to produce the large flow of milk that is expected from her, but when she is not giving milk it is natural that this machinery must still assimilate and appropriate this water if she is given the foods that contain it, and as she has no outlet for the same, her body becomes saturated and milk fever is the result.

This article is devoid of technicalities and theories and is based on hard facts, fully recorded, learned in the field of bitter experience. To the progressive young dairyman this article should be worth many times the subscription price of Blooded Stock for the balance of his natural life. Doubts as to the correctness of our position are stupid, when you realize that we produced six cases, five fatal, in one year in a small dairy, and have had no cases before or since.

Autumn of 1903 a neighbor lost a cow with milk fever. Enquiry brought out the fact that this cow had eaten freely of turnips. The writer warned him along the lines denoted in this article. He has not had any milk fever since.

BLOODED STOCK

Probably in our case, the conditions were extremely adverse; We fed much moist ensilage and brewers grains, very little hay, and followed up with pasture soiling crops and all in a wet season. Had the conditions been less radical possibly the writer would have failed to discover the cause of the fatality. Once the cause is known, any reflective dairyman can trace every case that has come under his observation to the causes that have been given in this article.

FOR SALE—Holstein Bulls, all ages up to one year from cows that have records up to 30 lbs 12oz of butter in 7 days. Are richly bred and good size. **Chester White Boars** ready for service and young pigs either sex at farmers' prices. **S. F. WILLIAMS**, Canton, Pa.

SHORT-HORN BULL CALVES

Chester White Pigs; W. P. Rock Eggs
\$1.00 per setting
JOS. T. FLEMING, Belleville, Pa.

FOR SALE—Medoc 14316, fine bay stallion, 15½ hands high. Sired by Montgomery 3512, dam Abana, second dam Bazar, dam of Fanny Wilkes. He is a fine breeder and has trial trotting record of 2:24½.
J. M. MINOR, CORINTH, K. Y.



Jersey Heifer Calves,
Four to six weeks old.
Hood Farm! Blood. Will
sell these calves reason-
able. They are from bus-
iness cows.

ERI H. POWLEY,
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MAKES PROFIT



INCREASED THE MILK 35 LBS. IN 10 DAYS
N. Haas, of Scotts, Mich. increased his milk yield from three cows 35 lbs. in 10 days—his butter 6 lbs. You can do as well or better; you can increase your milk yield if you will do as Mr. Haas did. He fed

Ashland Stock Food
and made a nice profit without extra work or bother. **ASHLAND STOCK FOOD** increases digestion 70 to 75 per cent, thus converting just that much more of the feed into milk and butter fat. Saves feed—saves stock. Sold on a safe guarantee: if it fails you get it FREE. Ask your dealer to supply you or write direct to us for it. Write today for **STOCK BOOK FREE**—it should be in the hands of every farmer—valuable in emergencies. Tells how to make more profit.
The Ashland Stock Food Co., Dept. A Ashland, O.

INSURE YOUR HOGS

The cheapest insurance you can get against hog cholera is in a package of **O. I. C.**, the hog cholera preventive that positively prevents swine diseases. If it fails, you get your money back. If it did not do the work, it could not be sold on such broad terms. Besides its preventive qualities it makes more pork on less feed in less time; destroys worms; cures thumps, scours; stops coughs; relieves hogs when smut poisoned, and insures rugged, robust hog-health.

O. I. C. HOG CHOLERA PREVENTIVE

Costs "1c per week per hog." Can you afford to neglect testing a remedy that costs so little and insures so much? Remember, we take all risk when you buy it—you take all risk when you fail to try it. Send for 5 lb. package, price \$1.50 prepaid. Book on hog cholera—how to prevent it, free on request.
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No matter how good rations you provide; no matter what quantity fed, your stock will not earn as much for you as they would if fed **Tonic Stock Food** "Elgin Brand." It is compounded in 4 separate formulas for hogs, dairy cows, sheep, beef cattle, horses, etc. It increases the flow of saliva, sharpens the appetite, renders food more palatable. It is a condimental conditioner, digestant and assimilator. Every animal you own is voiding a large per cent undigested of every 100 lbs. fed. There's no need of so much costly waste. Spend a few cents a week for

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"Elgin Brand" for "General Feeding"
Mix it with any ration and it will increase fat, milk or flesh. \$3.50 invested in a 100 lb. bag of Tonic Stock Food will save you \$10.00 worth of feed and give you a profit in feed saved of \$6.50. Certainly you can afford it. Begin to feed it now. Get your profits quicker at less feed cost. "Elgin Brand" Tonic Stock Food will help you make more money on your stock, easier, quicker and more certain than ever before. Ask your dealer for Tonic Stock Food "Elgin Brand." If he hasn't it we will ship direct. We deliver freight free, \$3.50 per 100 lbs. Write for our beautiful Souvenir Calendar and booklet free. Address Dept. 23
TONIC STOCK FOOD CO., ELGIN, ILLINOIS.

BLOODED STOCK

WHAT WOULD YOU DO WITH THIS \$1,000?

WE hereby agree to pay you \$1,000 in cash if we do not have the original letters, of our testimonials, on file in our office open for public inspection. We have many thousands, similar to those given below, and they are from people who would no more sign a misleading statement than you.

MADE \$365.00 PROFIT IN THE VALUE OF ONE GOLT.

DEAR SIR:—A few months ago I purchased an Arion colt in Kentucky for \$125. This colt was poor and undersized and certainly not very promising. We commenced feeding him "International Stock Food" every day with his grain and this fall could have sold him for \$400, but consider him worth more money. I cannot guarantee such great results in every case but will guarantee that its use will always pay you a big extra profit. I also want to assure you personally, that Dan Patch has eaten "International Stock Food" every day for over 3 years and you know what he has done. Also that my other stallions Cresceus 2:02½, Directum 2:05½, Arion 2:07½, Roy Wilkes 2:06½, Ed Patch 2:08½, Buttonwood 2:17 and my hundred brood mares and colts eat it every day. You will find it very profitable to use for your horses, colts and all other stock.
M. W. SAVAGE.

DAN PATCH 1:55½ MAILED FREE

We have a Beautiful 6 Color Picture of our Champion Pacer, Dan Patch 1:55½, size 16x24. This picture is entirely free of advertising and makes a fine picture for framing, as it gives all the records made by the pacer wonder. We will mail you one free, postage prepaid, if you will write us how much stock you own and name this paper. Write at once to
International Stock Food Co., Minneapolis, Minn. U.S.A.

INCREASES THE MILK, SAVES THE CALVES.

INTERNATIONAL STOCK FOOD CO. Marion, Iowa.
DEAR SIR:—I have used several kinds of stock foods but have never fed any equal to "International Stock Food". I have been feeding it to my milk cows with the most gratifying results. It not only keeps the cows in a healthy condition, but greatly increases the quality as well as the richness of milk. Its effects are unequalled in removing any irregularities at calving time, and its use before and after calving I consider a great benefit. As an appetizer, blood purifier and general tonic, I consider it to be all you claim, and the best I have ever used.
HENRY L. ALLEN, Prop. So. Side Dairy.

21 PIGS FROM ONE SOW—52 PIGS FROM 3 SOWS.

INTERNATIONAL STOCK FOOD CO. Merrimac, Massachusetts.
DEAR SIR:—I have three sows and one farrowed 21 pigs, another 16 and the other 15. I fed these sows "International Stock Food", and it is splendid for sows and pigs. I also tested it for a little runt and in seven months, "International Stock Food" made this runt weigh 223 pounds.
Yours truly, **NICHOLAS G. KINSMAN**.

National Poland-China Record Company

The Annual Meeting of the Ohio Poland China Record Company was held at the Phillips House in Dayton, Ohio, Wednesday, January 24th, 1906.

The meeting was called to order by President L. C. Nixon and the report of the Secretary and Treasurer showed that the balance on hands at the last Annual Meeting was \$1560.13; that there had been received during the year, \$2865.28; that there had been disbursed during the year, \$3359.03, leaving balance on hands, \$966.38, which report after the same had been verified by the auditing Committee and reported correct, was approved.

The question of amending the articles of incorporation of said Company, changing the name to the National Poland China Record Company was then called for vote. The ballot was taken and resulted as follows:

Number of votes cast in favor of said amendment, 259; necessary to adopt said amendment, 209. The President declared the amendment carried and the name changed. Immediately upon adopting the name of the National Poland China Record Company, W. H. Morris, Sec'y of the Central Poland China Record Company, of Indianapolis, Indiana, presented signed contracts for the holders of 307 shares of Stock in said Central Record Company and with them the request that they be accepted by the National Poland China Record Company, and that there be issued in exchange, certificates of stock for said number of shares issued to the persons signing such contracts which were accepted making the signers of said contracts, at once, members of the National Poland China Record Company. There had already been issued 347 shares from the Central, making a total of 654 shares of the National Poland China Record Company.

Nominations for Directors for the ensuing year then called for and resulted as follows: Adam F. May, Flatrock, J. H. Lackey, Jamestown,

Ohio, L. C. Nixon, Lebanon, Ohio, J. M. Klever, Bloomington, Ohio, T. E. Lindley, Russiaville, Ind., J. W. Williams, Briant, Ind., and W. O. Canaday, Anderson, Ind. There being but seven names placed for nomination, which being the necessary number to be elected, a motion was made that the Secretary cast the entire vote of all the members present for the said seven members as said Board of Directors and that the vote on this motion be taken at 1 o'clock.

Meeting called to order by president L. C. Nixon. Motion above referred to carried unanimously, and according to such instruction the Secretary cast the vote of all members present for members above referred to for Directors of the National Poland China Record Company for the ensuing year.

It was then time that the Board of Directors should meet for organization, and Vice President W. C. Hankinson was called to the chair to preside over the further deliberations of the Annual Meeting, which devoted some time to a general discussion on various subjects.

Annual Meeting then adjourned to meet in Dayton, Ohio, the 4th Wednesday in January, 1907. The Board of Directors organized by electing L. C. Nixon President, A. F. May Vice President, J. H. Lackey Treasurer, A. M. Brown Secretary. Executive Committee: J. M. Klever, W. O. Canaday, and J. W. Williams.

Fees for recording Poland Chinas in Company was fixed as follows: To stockholders for all animals under thirty months of age, 50c each; to non-stockholders for all animals under thirty months, \$1.00 each; all animals thirty months old or over, \$2.00 each whether they be sent by stockholders or not, or whether the animals are living or dead.

Supplies to be furnished as follows: pedigree book with 100 blanks, \$1.00; with 50 blanks, 50c; loose blanks 1c each to be furnished by the Secretary

prepaid upon receipt of the price named.

The Secretary's office was located at Winchester, Indianapolis, on the Cleveland Division of the Pennsylvania Railway and the Dayton & Muncie Traction line.

The stock of this Company is now on sale at \$15.00 per share. Write the Secretary for stock, supplies, registration or any further information desired.

For stock, Supplies, Registry or Information. Address, A. M. Brown, Secretary, Winchester, Indiana.

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The oldest, best known, most reliable, and extensively used of all Condition Powders. It cures Chronic Cough, Heaves, Influenza, Distemper, Hide Bound, Indigestion, Constipation, and all Stomach Troubles. Restores lost appetite, and increases the assimilation. It assists in fattening and increases the quantity of milk and cream. Guaranteed to give satisfaction. Sold by druggists, General Merchandise, and Feed dealers, or sent charges prepaid at the following rate:

Package 25c; 5 Packages, \$1.00; 12 Packages, \$2.00.

BEWARE OF IMITATIONS and remember that each package of the genuine is covered with a pink wrapper. Send for descriptive literature.

The David E. Foutz Co.,
Baltimore, Md.

GRASS CULTURE

(Continued from 8)

pick could not be driven into the surface at one blow to a depth of three inches. The land raises east, west and northwest until that higher corner of the 16 acre field is 125 feet higher than the other. The character of the soil changes as it rises until it finishes at the highest point in a gravel knoll, with little or no loam in it. Nearly all kinds of land can be found in it that can be found in the country. To commence with I had to remove a thousand tons of rocks to the acre, which was done by digging ditches 9 feet wide, 7 feet deep, then blasting and hauling the rocks into these ditches and covering them one foot deep at a cost of \$4750.

This method was a mistake. If I had hauled them off and made a pyramid of them, the field would have been worth a thousand dollars more. Why, it interfered with the subsoil water connection. Unless you get perfect subsoil water connection you cannot make large crops of any kind. To start with this abandoned New England farm did not produce 200 pounds of vegetation to the acre any year in 50 years. It was covered with rocks, small brush and moss. I have kept a small portion of the original field to show what the rock, moss and brush-bound abandoned field was.

There is no such thing as worn out land. Sunshine and air will work wonders. Now that I know what to do I can take almost any kind of land, in 12 months from the start, produce four to six tons of well bred hay to the acre, that is what I am here to tell you, to tell you how to make money on the farm. I have experimented for 20 years and more and know more than when I started. I would not believe what I am telling you today if I did not know it to be true. I do not blame people for taking my statements with a grain of doubt, they often refer me to Annanias, but I am here with the facts and have come to stay and teach others. Intense cultivation is the watch word. I invite my friends to come and see the field and its surroundings and see for themselves. Thousands of them have. Your farms can be made to pay and when they do the boys and girls will stay on the farms.

This Year's Yield.

This year, 1905, my eleventh and one-eighth acres of the same field produced 116,121 pounds of well dried hay. This first crop was over fifty-eight tons, and second crop on seven acres of this field, 35,010 pounds. This hay cost me in the barn less than \$5.00 per ton, making a net profit, with the hay figuring at \$15.00, which is below the present market value, of \$68.00 per acre. My seven-eighths acre field, now seeded sixteen years, cut this year 20,560 pounds, over ten tons. Total in sixteen years, two crops, over 135 tons.

I think this yielded remarkable, sixteenth year after seeding, over ten tons of well dried hay in two crops.

The relative stand of timothy and red top is substantially the same as when first seeded. The first cost of cleaning this 16 acre field, as before stated, was \$4750. That money has all been paid back with large interest. Again, I have given you all one of my grass circulars and a copy of this lecture. What I wish is to spread this information as far and wide as possible, for I

am sure, with intense cultivation and care, that we can double the product of the soil, whether with the cultivation of grass or otherwise, and that we can make money on a farm. Anyone who will send me a two-cent stamp can get this knowledge.

How to Harvest the Crop.

One word on the matter of drying my hay. The first crop this year had an average of three full days' good sunshine. The second crop had eight days without rain, five of them bright sunshine, both crops were well tattered and spread, and heaped up every night. This is my method of drying hay.

Best Kinds of Grass.

I have tried all the different kinds of grass that I could find, singly and combined, with many of the different kinds together and have finally adopted two kinds, timothy and red top, as I have found that they work best together and will produce about a ton and a half more hay to the acre.

Successful Machines.

As to the machines, I have kept a large force of pattern makers at work for more than thirty years making improved earth stirring machines. Have perfected thousands and yet I have thus far found only a few machines that I could adapt to produce intense cultivation cheaply, and that must be done.

Higher Cultivation.

I only described my own conditions for my field at the start was as poor as any. It cost \$300.00 per acre to commence. That is not the case with the average farm.

There is something in this intense cultivation—in my method, with it many a farmer can start his first crop and commence to make money. Why not get out of the old rut? Take a small section of land, give it the higher cultivation and care and commence making the farm pay. Why not?

How to Produce a Crop of Alfalfa.

Alfalfa must be reset every third year. I have been using Cutaway Harrows for resetting Alfalfa along the west coast for a great many years. Those best acquainted with the production of this crop have decided it should be reset at least every third year, and the best method is to sow about ten pounds of new seed to the acre then go over it with the Cutaway Harrow set at a light angle, in both directions and split the heads of the old plants and reset with the new seed. By that means the crop can be produced continuously for a long term of years. My experience, of course, is not confined to my this year's experiments. Here is what I have done. I took three and one-half acres of the very highest, driest and poorest section of my field, 100 feet above the water line, and intensely cultivated it with my double action Cutaway Harrow to the depth of six inches or more, then I sowed twenty-five pounds of Alfalfa seed to the acre, the 3rd, of June, and 800 pounds of high grade fertilizer to each acre. On July 24, fifty-two days after seeding, I cut and cured 10,760



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of Standard bred poultry for 1906, printed in beautiful colors, contains Fine Chromo, illustrations and describes 60 varieties. Gives reasonable prices for stock and eggs, tells all about poultry, their diseases, lice, etc. This book only 10 cents.
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Big hatches and broods prove their money-making merits.
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IT'S A CORKER
The Keystone Incubator—cork lined, double walls, adjustable egg trays, safety lamp, heat and ventilation under perfect control. Easy to operate. Big, healthy hatchlings. It's a corker every way. Catalog free. The Diehl-Schilling Co., Box 684, Easton, Pa.

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Backed by 14 Years of Successful Use by poultrymen all over the world. No guesswork. They are automatic in regulation and ventilation. Fully guaranteed to give YOU satisfaction. Send for free book. **BANTA-BREEDER** MFG. CO., Dept. 52, Ligonier, Ind.

METAL MOTHERS
Complete fireproof hatching and brooding plant for \$7.50. 2 qts. oil will hatch and brood the chicks. Our nest system is the latest discovery. Full line poultry supplies. Lowest prices. FREE catalogue. Write to-day.
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before you buy. Perfectly practical for poultrymen or beginners. Double heating system gives bigger hatches—saves one-third the oil. Sold on a money back guarantee. Write for free catalogue. Reliable Farm Pure-Bred Birds and Eggs. Get prices. Reliable Incubator and Brooder Co., Box B-410 Quincy, Illinois, U. S. A.

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Describes over 40 Leading Varieties of standard bred fowls. Quality the best. EGGS IN SEASON. STOCK FOR SALE.
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Write for a free copy of my book describing
Profitable Combinations of Egg, Broiler and Roaster Farms

It gives the prices paid for eggs and poultry week by week for the past three years. It tells how and when a hatch taken off each week in the year could be most profitably marketed. It shows how you can make \$2.00 on a large winter roaster. It tells what profits can be made with each of the popular breeds, and the costs of production. I have helped thousands to make money with poultry. My Model Incubators and Brooders are used on the money-making farms. It is my business to teach those who use them to do so profitably. Whether your needs are small or large, I will furnish without charge, estimates and plans for a complete equipment that will insure success without your spending a dollar uselessly. Send for my complete literature.

CHAS. A. CYPHERS
4515 Henry St. Buffalo, N. Y.

pounds of dry hay, and on September 13th I cut and cured 10,850 pounds more of dry hay or 21,610 pounds, almost 11 tons, in 103 days from time of seeding. It is safe to say three tons to the acre of dry alfalfa is very extensive at first, yet I think that there are many high and dry fields in New England that could be utilized in the production of alfalfa.

Directions for Sowing and Perpetually Maintaining a Crop of Alfalfa.

First, alfalfa will grow on dry land. To prepare the soil it must be thoroughly and most intensely cultivated and made true to the depth of six to eight inches, without thorough cultivation you will fail. I use my Double Action A-5 Cutaway Harrow, 26 in. Rev. Sulky Disk Plow and 8 foot Smoothing or Grading Harrow. When so cultivated I use 10 to 25 loads of decomposed yard manure to the acre and, where there is no lime in the soil use four barrels of air-slaked lime, then with the Double Action Harrow mix it thoroughly with the surface soil, then sow three hundred pounds of Nitrate of Soda and thirty-five pounds of Alfalfa seed between lines to each acre, then harrow with the smoothing harrow in four directions, working the seed into the soil about 1½ inches then roll smooth. With this treatment 110 of the heads should be in blossom in fifty-five days. When the first crop is cut, sow 5 to 10 pounds more seed to the acre, take the Double Action Harrow, set at a light angle and go over the field in opposite direction, then in fifty-five days another crop should be ready. We ought to get three crops a year. Repeat this harrowing process each crop until a perfect stand is obtained, adding a little new seed each time. Every third year sow more seed and repeat the harrowing, also each year add more decomposed yard manure. The best way to dry alfalfa is to put it upon racks, three feet square and one foot high, putting enough on each rack to make 100 pounds of dry hay and let it remain there until dry, that keeps the ground free so that the plants can keep on growing without interruption.

A few things better not be done. Never dig ditches to fill with rocks in a grass field. Never underdrain your grass field until you find it necessary. Never pasture or make a road bed of your grass fields or let animals stand, stamp or otherwise kill the grass roots. Use no coarse manure on grass field after seeding. An old field can be reseeded in a month but it is better to take a year and get one crop of oats for hay.

Mow your grass field close just before frost and rake clean. Fertilize every crop a little more than needed for each crop.

Don't undertake to steal anything from the soil.

Bear in mind your grass fields will never winter kill or die as long as it has anything to live for.

This is all I care to say in relation to this subject at present. You may think of many other things that you would like to inquire about. For that reason, if you desire to ask any questions, I am now ready to give you the fullest information possible in relation to this subject.

AGENTS WANTED

Burners for stove of any description. Vaporizes oil which produces a flame. Cheaper than other fuel. No smoke. No odor. Burners guaranteed to give satisfaction or money refunded. For terms write **WOOD & DYKINS, Camden, N. J.**

Don't Neglect Catarrh



Catarrh Specialist Sproule
Who Will Give Free Advice on Curing Catarrh to All Who Ask For It.

Take it in hand at once! Drive it out of your system before it ruins your health—your happiness—your very life itself!

Don't be blind to its dangers, because it works so quietly. Catarrh wrecks more lives than 11 the other diseases put together—it leads on every year to thousands upon thousands of deaths.

Are you making that common, dangerous mistake of thinking Catarrh a trifling ailment? Are you fooling yourself with the idea it's only a stubborn obstinate head-cold that in time will "cure itself"?

Don't deceive yourself any longer! Catarrh can't cure itself. While you heedlessly neglect it, you're fast becoming a hawking, spitting, foul-breathed nuisance—an object of disgust to every one you meet. **Worse still—you're allowing Catarrh to get down to your lungs.**

Once Catarrh settles on the lungs it's no longer Catarrh—it's Consumption. Consumption often results from neglected Catarrh, and great numbers of people die every year just because they've neglected Catarrh.

CURE YOUR CATARRH NOW!—don't let it run on another day. Write to me at once and let me give you the most helpful and valuable

Medical Advice Free

on just how to cure Catarrh. It shall not cost you a cent, and it's bound to be of wonderful aid to you.

Let me show you what I'll do for you entirely without charge. For twenty-one years I've been studying and curing Catarrh. Now I offer you, without any expense whatever, free consultation and advice on curing your trouble—the benefit of my wide knowledge and beneficial discoveries.

Don't let this chance go by—accept my assistance today! It's promised in genuine sincerity and friendliness. People all over North America, who've already received my advice, gladly testify to what it has done for them. I'll cheerfully send you names and addresses of those who have sought my aid. Now they are cured of Catarrh, as they willingly bear witness.

You can be free from Catarrh if you will—absolutely and permanently.

Simply answer my questions yes or no, write your name and address plainly on the dotted lines, cut out the free medical advice coupon and mail it to me without delay. Address **Catarrh Specialist Sproule** (Graduate in Medicine and Surgery, Dublin University, Ireland, formerly Surgeon British Royal Mail Naval Service) 385 Trade Building, Boston. Don't waste any time—delays are dangerous. Do it NOW.

CUT OUT THIS COUPON

It entitles readers of this paper to free medical advice on curing Catarrh.

Is your throat raw?
Do you sneeze often?
Is your breath foul?
Are your eyes watery?
Do you take cold easily?
Is your nose stopped up?
Do you have to spit often?
Do cruds form in the nose?
Are you worse in damp weather?
Do you blow your nose a good deal?
Does your mouth taste bad mornings?
Do you have a dull feeling in your head?
Do you have to clear your throat on rising?
Is there a tickling sensation in your throat?
Do you have an unpleasant discharge from your nose?
Does the mucus drop into your throat from the nose?

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International Veterinary Department.

C. D. SMEAD, V. S., Editor

Professional advice given free to all subscribers through this department of Blooded Stock. Always describe symptoms, age, etc., as accurately as possible. Whenever you want prompt personal advice by letter and not for publication enclose One Dollar (\$1.00) fee. To derive the greatest benefits from this department preserve regular files. Always send your full name, post office, county and state with each inquiry direct to the International Veterinary Department, Dr. Smead, Editor, Penn Yan, N. Y.

Vaginal Catarrh

Blooded Stock;

I have a mare which is about 14 years old. She has a mucous discharge or whites which she has had since I tried to breed from her last July. She is worse after working or driving. I have no work for her at present and only driving her once or twice a week. But she is quite bad standing in the barn. I am feeding ground corn and oats about six quarts a day and also hay. She is not in foal now.

I saw in my Blooded Stock paper that you would answer any questions which your subscribers would ask. Now will you kindly inform me if there is any help for her and what to do. Enclosed please find stamp.

Very truly yours,
Frank T. Lechien.

Your mare has Vaginal Catarrh (Leurhea). It probably was brought on by you attempting to breed her at about the period of a change of life with her. To save her may be no easy job. But procure a syringe holding about one pint and prepare a solution compound of creolin one ounce, one gallon of warm soft water and inject twice weekly into the vagina, also have prepared 4 ounces of finely powdered sulphate of iron, 3 ounces granular root, 1 ounce of powdered nuxvomica, mix in 2 pounds of granulated sugar, give of this one table spoonful morning and night in a feed of ground oats and wheat middlings. She must not be required to do hard labor until entirely well.

C. D. SMEAD, V. S.

Draft Horses.

Heavy draft horses are in demand and scarce at high prices. They will continue to sell well and have always done so if of first class quality. They cannot, however, be produced from light-weight mares. The attempt is being made to produce them from fifteen hundred pound mares and sixteen

BLOODED STOCK

hundred pound stallions. This is foolishness. A draft horse should weigh eighteen hundred pounds and over that weight if possible. The brood mare should therefore be over sixteen hundred pounds and the stallion over eighteen hundred pounds. Given to suitable mates the offspring will be likely to develop into a sufficiently heavy gelding if fed from birth for full development. Breed is but part of the equation of success. Feed is the other factor and equally important. It is often the lacking one and the feeder takes the incompletely developed colt at two or three years old and stuffs it into a marketable animal. The fattened drafter is a fraud. Work will melt off the fat and he is found to be light in weight and frame. The way to get full weight is to develop it from the start and continue producing growth until the full possibility of growth has been attained. Such a horse is not necessarily fat. He is simply full grown, and hence an ideal draft animal.—A. S. Alexander, Wisconsin Experiment Station.

Growth of a Great Horse Remedy. No better illustration can be given of great things coming from small beginnings than Kendall's Spavin Cure. It was compounded and used in a small way about 30 years ago by Dr. B. J. Kendall in the then obscure village of Enosburg Falls, Vt. Since then the name of "Kendall's Spavin Cure" has gone to all parts of the world. The merits, and the merits alone, of the remedy have done it.

While Dr. Kendall was practicing he wrote a little book entitled "A Treatise on the Horse and his Diseases." It is safe to say that no more popular work on this subject has ever been produced down to the present day. It was originally handed out to the horsemen with whom he came in personal contact. It is said that now upwards of 12,000,000 of these little books have been published and gratuitously distributed. The cures of spavin, curb, ringbone, splint, wire cuts, etc., and the expense and labor saved to horse owners by Kendall's Spavin Cure are beyond comprehension. For the greatest part of these 30 years Kendall's Spavin Cure has been chief, and with thousands of horsemen the only remedy used. It must be remembered that it is not confined to this country. It is decidedly a world remedy. With the little book mentioned above to guide, and with Kendall's Spavin Cure at hand to treat promptly any case of spavin, wound, lameness, incipient bone growth, etc., the ordinary owner is well fortified against all the common ailments to which horse flesh is liable. We believe it to be unquestionably a more efficient remedy and adapted to the cure of more of the ailments to which the horse is liable than any other now on the market.

Zenon Veterinary Adviser. A copy of this interesting well-printed book containing sixty-four pages of valuable advice, prepared by the leading veterinarians in the world for live stock owners, and printed at a great expense by the Zenner Disinfectant Company of Detroit, Michigan, will be sent to you and to your friends, upon request, absolutely free of all cost. If you want a copy of this book, send your name and address to the Zenner Disinfectant Company, 49 Bates Street, Detroit, Michigan, at once. Do not wait a minute. Do it now.

We do all kinds of Job Printing. Send us your work, it will be promptly done. Write us about it.

EASY TO DEHORN

your cattle with the KEYSTONE Dehorning Knife. Operation performed in an instant with little pain. Leaves stump so that it heals quickly. The KEYSTONE Dehorner is sold on a money back guarantee. Send for free booklet giving valuable dehorning facts. M. T. Phillips, Box 21, Pomeroy, Pa.

Horse Owners! Use

GOMBAULT'S
Caustic Balsam

A Safe, Speedy, and Positive Cure
The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
THE LAWRENCE-WILLIAMS CO., Cleveland, O.

NEW WORM REMEDY 25¢
VETERINARY ADVICE FREE. AGENTS WANTED.
DR. FAIR VETERINARY REMEDY CO., Cleveland, O.

Never Root Hog
Tamer & Ear Marker
stops rooting, all sizes, hogs grow and fatten quicker, marks all stock, marks registry number, valuable record, all for \$1. postpaid, hog holder 75c, both \$1.25; grass seeder \$1.25; all three \$2.25 by ex. Buncher \$5. W. L. Shore Mfg. Co. Box 22 Quincy, Ill.



ROSS PIG EXTRACTOR.
Every farmer send for set, \$1.00 by mail. Saves pigs alive. Not satisfied, money returned. Farmers for Agents can make hundreds of dollars in each county. Treatise on raising hogs with each set free.
H. MEDENHALL, A. d ubon, a

Immune Hogs

By feeding the new Ridgway Vaccine—10 cents a litter—the pigs are vaccinated before birth, hence are born CHOLERA PROOF. One million successful tests. 10,000 strong testimonials. In further proof will ship my own suckling pigs and expose them for weeks in sick cholera herds at MY OWN EXPENSE AND RISK. No other MAN, DOCTOR or VETERINARY ever did or yet dares take any such risk. WHY? Simply because he would lose both his hogs and business. During the past six years I have shipped and exposed in sick cholera herds, scattered from Virginia to Nebraska, and from Michigan to Florida, over 1000 of my own suckling pigs, WITHOUT LOSS FROM CHOLERA. I give a written guarantee backed by \$10,000 approved security. Book free.

ROBERT RIDGWAY, Box T, Amboy, Ind.

CAR-SUL

The Disinfectant Dip That is Guaranteed.
Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.
Send For Free Book
on care of hogs and other live stock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.
Trial gallon \$1.50, express paid; 5 gallon can \$5.00, freight paid.
Moore Chemical & Mfg. Co.
Manufacturers of Bleaching Soda. 1502 S. Broadway St., Kansas City, Mo.

BLOODED STOCK

PROFITS N EGGS

The egg-laying contest, arranged by the Kansas White Wyandotte club and conducted by the Dairy and Animal Industry Department of the Kansas Experiment Station, was completed October 31. Each contesting pen consisted of a male and six females, and the competition lasted one year.

The hens have made a fair record, and the average yield will compare favorably with that of other authentic egg-laying contests. Better records

would probably have been made had it not been for some unfavorable conditions which accompanied the carrying on of such a contest; as, for instance, the transportation and frequent handling of the fowls, and the adaptation to strange rations and surroundings, all of which tend to diminish the egg yield. Besides these usual unfavorable conditions, the winter was the most severe ever known in the State. The pens in which it was necessary to house the contest fowls were of the curtain front type and built for the accommodation of twenty-five fowls each. This house with its ample ventilation, is perfectly satisfactory when filled with a sufficient number of birds per pen to maintain the heat, but with only the six hens prescribed by the rules in the contest, the house was cold and the egg yield was proportionately reduced.

The method of care and feeding followed were designed to bring out fair comparative results of the breeds and of the individuals, rather than forced egg yields. A variety of grain was fed the year round. This was fed in straw in the winter and in the yards in the summer. An evening mash was fed the entire year, composed at first of equal parts of bran, chop, meat-meal, shorts and linseed meal, and later of bran, chop, and meat-meal only. In the winter, mangles and alfalfa leaves, and in the summer, green alfalfa and rape, were used for bulky food. Oyster shell and grit were supplied. No fresh meat, hot mashes, ground bones, red pepper, patent foods or medicines were fed. The intention was to use only such foods as produced normal results and can be secured at any place and in any season.

Pen No. 1. S. C. White Leghorns laid 885 eggs. Pen No. 2. R. C. White Leghorns laid 828 eggs. Pen No. 3. American Reds laid 820 eggs. Pen No. 4. White Wyandottes laid 799 eggs. Pen No. 5. Buff Wyandottes laid 764 eggs. Pen No. 6. Barred Plymouth Rocks laid 619 eggs. Pen No. 7. Light Brahmas laid 539 eggs.

Value of the eggs laid by No. 1. \$ 9.650
Cost of Food. 4.764
Gain 4.886
Value of the eggs laid by No. 2. \$ 9.743
Cost of Food. 4.675
Gain 5.068
Value of the eggs laid by No. 3. \$ 10.027
Cost of Food. 5.579
Gain 4.448
Value of the eggs laid by No. 4. \$ 8.944
Cost of Food. 5.676
Gain 3.268
Value of the eggs for No. 5. \$ 8.990

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent or exchange, poultry, poultry supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants, and vegetables. The cost of advertising is

Only Two Cents a Word, all classified. Each initial or number counted as one word. No advertisement taken for less than 25 cents each issue. All replies must be sent direct to advertisers. Cash covering the exact number of words at 2 cents each must be sent with every order.

This Department for Live Stock Only.

CATTLE.

SUNNY SLOPE HERD of Red Polled Cattle—the best and dairy breed. Choice young stock for sale. L. H. WALKER, Reed City, Michigan.

JERSEYS—Combination and Golden Lad. For sale—10 cows, 10 heifers and 20 bulls. S. E. NIVIN, Landenberg, Pa.

FOR SALE—Reg. Red Polled Bull Calves—from 6 wks to 15 mos. old, sired by Damo son of Imported Cossensette. Prices reasonable. F. E. BURRHOUS, Walton, N. Y.

HOGS.

POLAND-CHINA PIGS, \$8 up. Best Seed Corn. \$1.25 bushel. Barred Rocks, Brown Leghorns. Eggs from choice pens \$1.75 for 15. Write for circular. FRANK BEAUCHAMP, Meredosia, Ill.

POLAND-CHINAS—Choice spring and fall Boars. One good herd header. Extra fine bred gilts. Fall pigs, both sexes, dandies. Write for special prices this month. G. F. McCLELLAN & SON, Groveland, Ill.

O. I. C. HOGS—2 fine sow pigs, weighing between 75 and 100 lbs. Price \$8. Pedigree furnished. E. W. RAU, Cape Girardeau, Mo.

CHESTER WHITE SWINE, all ages, extra blood. R. H. McFADEN, Mgr., Oxford, Pa.

LARGE ENGLISH YORKSHIRES—Thoroughbred, prolific, vigorous, record not equaled. J. B. TYLER, Tamaqua, Pa.

PURE BRED Chester White Pigs at all times, \$10 per pair and up. WILL H. CARL, Elysburg, Pa.

BERKSHIRE Sows 3 to 4 mos old, from registered stock, \$7.00 to \$8.00. W. A. LOTHERS, Lack, Pa.

LARGE English Yorkshires, sired by "White Side Comet". CHAS. S. SNOOKS, Utica Mills, Maryland.

REGISTERED Duroc Swine, Boars \$20, Express paid. WILLIAM HARKSHMAN, Utica Mills, Maryland.

FOR SALE—O. I. C. Swine, including pigs and sows bred. W. C. CRUSER, Montrose, Pa.

POULTRY

WHITE LEGHORNS—Good breeding cocks and cockerels, Foggy & McCleave prize-winning strains. \$1.00 and \$2.00 each. R. I. SATTERFIELD, Fairmount, W. Va. Route 5.

BUFF ORPHINGTONS, 15 eggs \$1.50. Barred Rocks 15 eggs \$1.00. White Holland Turkeys, 9 eggs \$2.00. Barred hens and roosters \$1.25 each. Up-to-date strains. W. A. LOTHERS, Lack, Pa.

NELSON'S guarantee a fair hatch from their famous egg producing strains of Barred Rocks and Brown Leghorns. Write NELSON'S, Grove City, Pa. R.F.D. No. 12

100 TURKEYS, Selected stock, Mammoth Bronze, White Holland, Buff and Narragansett. Eggs \$2 per 11.15 varieties, poultry eggs \$1.00 per 15. S. DURIGG & SON, Armstrongs Mills, Ohio.

FANCY POULTRY Eight colored page price list free. Address, G. G. Shoemaker, Box 34, York, Pa.

WHITE and BARRED Plymouth Rock fowls and Mammoth Bronze Turkeys. R. H. McFADEN, Oxford, Pa.

EGGS for Hatching—Rose Comb Rhode Island Reds. Price \$1.25 per 15. D. C. HUTCHISON, Oxford, Pa.

BARRED P. ROCK Cockerels. First-class birds. Write me. GEORGE C. POWLEY, Oxford, Pa.

WHITE WYANDOTTES, choice stock. Eggs \$1 per setting. F. L. VANDERHOOF, Jewett, Ill.

SINGLE COMB Rhode Island Reds Exclusively. 15 eggs \$1.50 LEWIS STEWART, Erie, Pa. Box 128.

MISCELLANEOUS

Money in Squabs. Our Free Book posts with little work. **EASTERN SQUAB CO.**, 30 Hawley St. Boston, Mass.

FOR SALE—Shetland Ponies, Ferrets, Poultry, Pigeons, Rabbits, Guinea Pigs, Goats, Cats, Dogs. 2-cent stamp for circulars. Col. Joseph Lefel, Springfield, Ohio.

PEDIGREE STOCK, Saratoga, Ind., farmers, poultry and stock journal; 9 months 10 cents.

Kendall's Spavin Cure

has never had an equal in the world for curing common horse ailments, such as Spavin, Ringbone, Curb, Splint and Lameness.
A Cure for Spavin, Washington Quibb, Mont., June 3, 1904.
Dr. B. J. Kendall Co., Dear Sir:—Enclosed find a 3 cent stamp for your book, "A Treatise on the Horse and his Diseases." Yours respectfully, W. James Fitzgerald.
I have used your Spavin Cure and found it a sure cure for Spavin.
Price \$1.00 for 25¢. Greatest known liniment for family use. All druggists. Accept no substitute. "Treatise on the Horse," free from druggists or
DR. B. J. KENDALL COMPANY, Enosburg Falls, Vermont.

EVERGREENS AND FOREST TREES
That are Sure to Satisfy
I have been growing evergreens and forest trees for 31 years, always with one idea—trees that satisfy. When you buy Hill's trees you get honest value—highest quality. My catalogue is my salesman; it's free. Contains 48 pages illustrated with beautiful pictures; describes all kinds of nursery stock for all purposes—trees, shrubs and vines. 50 Best Bargains ever offered—\$1.00 to \$10.00 per 100. Prepaid. Everything first-class, guaranteed exactly as represented. Write for catalogue today.
D. HILL, Evergreen Specialist
Dundee, Ill.

LONG ISLAND CABBAGE SEED
American Cauliflower Seed and other Choice Vegetable Seeds for gardeners.
FRANCIS BRILL, Grower,
Hempstead, N. Y.

BOONE COUNTY WHITE SEED CORN
Greatest yielder of medium early varieties, 105-110 days. Pure bred, raised from registered seed carefully selected, \$1.50 per bushel in the ear.
EMIL ANDERSON, PAXTON, ILL.

POLAND CHINAS. Top gilts bred to "Kentucky Meddler" sired by "Meddler" the world's champion. C. RAZOR, Salt Lick, Ky.

6 TONS OF WELL DRIED ALFALFA, RED TOP HAY to the acre
If you wish to learn how, send a 2-cent stamp to
GEORGE M. CLARK, HIGGAMUM, CONN., U. S. A.

SHOEMAKER'S BOOK ON POULTRY

AND CALENDAR FOR 1906, CONTAINS 100 PAGES, MANY COLORED PLATES TRUE TO LIFE. All about chickens, their care, diseases and remedies, incubators and how to operate them, poultry houses and how to build them.
PRICE ONLY 10¢.
G. G. SHOEMAKER, Box 34, York, Pa., U. S. A.

Let Us Quote You a Price

FANNING MILL
On a FIRST-CLASS
200,000 CHATHAM MILLS are in use today. They are doing the work. Many of them were sent to these users on the 30 day free trial plan. We will send you one to try, too. If it does not clean grain and seed, separate the good from the bad, and improve every bushel to your entire satisfaction, send it back and we will refund every cent of your money. We pay all freight. Now we could not make this offer if we did not know The Chatham will satisfy you.
Anyway, send today for our free book entitled "How to Make Dollars Out of Wind," a book on good seed, how to obtain it.
THE MANSON CAMPBELL CO. LTD.
891 Wason Avenue, Detroit, Mich.

A Profitable Business

Fowls, like other animals, have a natural season for reproduction. To produce eggs, broilers or roasters out of this natural breeding season requires special care and feedings such as the average farmer does not give his poultry. As a result, the great bulk of the eggs and poultry is produced during the natural breeding and growing season. This accounts for the lower prices received for these products during the spring and summer and their scarcity during the fall and winter. It is plainly evident that the person who prepares to handle and care for his fowls so as to produce eggs and broilers, — and lots of them — in the off season is going to greatly increase his profits thereby.

The rapid increase in the use of artificial methods for producing broilers and roasters out of the natural season has resulted in a comparative increase in the supply of fresh stock during this season, but the consumption of poultry produces has also increased so rapidly along with the growth of our large cities, that the demand has kept the prices up to the top notch, and there are no prospects of there ever again being a time when eggs and poultry will sell at such low prices as they brought eight or ten years ago. The ambitious farmer or poultryman can, therefore, make plans for raising poultry on the basis of present conditions and prices with a reasonable assurance of these conditions indefinitely.

Aside from the general markets of our great cities, special markets may be found all over the country. Wherever people congregate at either summer or winter resorts there will be a demand for fresh poultry and eggs at good prices. The farmer or poultryman must study the conditions and possibilities of his own location, and then cater to them. If his eggs are clean and fresh and his poultry of prime grade, he can usually command a good price, for, unlike a hog or steer, poultry and eggs can be marketed direct by express at a good profit.

Now comes the question of selecting an incubator and brooder for the proper conduct of the poultry business.

A Profitable Breed of Hogs

The Jersey Red pigs and hogs being offered by Arthur J. Collins, Box A., Moorestown, N. J., are of a very celebrated strain, and have many good qualities, a few of which we will mention here:—The sows are "Good Mothers," as they are careful of the young at birth, and seldom get up until after the entire litter is born,—many breeds of hogs do not do this. Jersey Reds suckle their pigs often and plentifully, they have lots of milk and that is what a small pig requires. The sow turns her feed into milk for her young instead of laying on fat and skipping the pigs. They are good foragers, being very happy in a field of rye, clover, beans, rape or sorghum, and very little corn is required to keep them in good shape. Jersey Red pigs grow very fast, fatten at any age and produce the very finest quality of meat—a layer of lean and a layer of fat.

BLOODED STOCK

There are many different machines on the market, but we know of none so good as Chas. A. Cyphers' Model Incubators and Brooders. We are not alone in this belief, for thousands of the largest and best poultrymen in the country have discarded their old machines for the "Model" and they all state that there is none so economical in the use of oil, or requires so little of the attendant's time to operate, or hatches such a large per cent of strong, healthy chicks as the "Model" Incubator.

Mr. Cyphers has been manufacturing incubators and brooders for many years and has embodied the results of his many experiments and long experiences in the Model Machines. The system of air circulation is entirely new and gives them perfect ventilation. He has added a new patent thermostat which gives a much larger movement and consequently prevents any variation in temperature. Every poultryman realizes the value of this feature on an incubator or brooder in hatching and rearing strong, vigorous chicks. In fact, we would advise everyone who wishes to make the greatest possible profit from poultry to get Model Incubators and Brooders. Those of our readers who have not secured one of this season's catalogues of these machines will do well to write to Mr. Chas. A. Cyphers, 900 Henry Street, Buffalo, N. Y., for a catalogue and a copy of his valuable book, "Eggs, Broilers and Roasters." This book is one of the most interesting and instructive pieces of literature ever gotten out on the subject. It takes up the different branches of the poultry business and covers them thoroughly. Mr. Cyphers has had much practical experience in rearing and feeding poultry, both for eggs and for broilers, and he is recognized by all poultrymen to be one of our best authorities on these subjects. He will send this book, "Eggs, Broilers and Roasters" free of charge to everyone interested in poultry-raising, and we feel sure that our readers will get much profitable knowledge from it.



Mr. Collins is also an extensive grower of fruit trees, plants, shrubs and vines. His large illustrated catalogue has a valuable spraying chart which tells how and when to spray; it also has some new formulas for spraying mixtures. We would advise our readers who are interested in hog-raising or fruit-growing to write to Mr. Collins, at Moorestown, N. Y., for this catalogue as he will gladly send it free of charge to all who mention this paper.

The Penna Berkshire Co., Fanetta-burg, Pa., are offering a fine lot of Berkshires for sale. Send in your order at once.

It is interesting to note that The David E. Foutz Company of Baltimore, Md., who have for nearly 50 years been the manufacturers of the celebrated stock medicine, namely Foutz's Horse and Cattle Powder, have been exploiting a stock food known as Foutz's Proteinous Stock Food No. 1 of very high protein value. We believe this to be the highest protein food placed on the market and know that their guarantee under the pure food laws of the State of Maryland requires them to furnish not less than 75 per cent protein. Our readers know the value of protein and we believe it would be well for them to investigate the Stock Food made by this Company as we know their other veterinary preparations are of high standing and have had exceptional large sale for years.

THE AIR-COOLED Power and Pumping Engine

The engine that requires no water, that has no water jacket, pipe connections or tank to freeze; no igniter to get out of order. Fired with a jump spark. Cooline kept in base of engine. A fan on exhaust side cools it. It's the ideal power for farm or city use. Always reliable—always ready. It's horse power. Costs only 10¢ an hour for fuel. For further information, address CHAS. G. BLANCHLEY, Swanson, McKean and Meadow Sts., Philadelphia, Pa.

GEDNEY FARM HIGHEST CLASS JERSEYS



GOLDEN STREAMER 60500
Son of FORDSHIRE out of G LEDEN STREAM 8th, born Feb. 22 1901, and considered the best Jersey bull that ever crossed the Atlantic as a two year old.
Specialty.—Young bulls and heifers, all ages. Also Imp. CHESTER WHITES and BERKSHIRE PIGS. Standard bred BLACK MINORCAS and WHITE WYANDOTTES.
Correspondence solicited.
GEDNEY FARM. White Plains, N. Y.

Corn Breeding

Is the principal feature of the new monthly magazine FARM AND STOCK published at St. Joseph, Missouri. This publication is devoted principally to CORN and LIVE STOCK, and is the only monthly magazine in existence covering these topics. The progressive breeder has many daily and weekly papers which keep him posted on market reports, etc., and FARM AND STOCK, a monthly, is his best medium for scientific instruction.

Farm and Stock

For 1906 will be handsomely illustrated with half-tone pictures, and will be printed on high grade super-calendered paper. A specialty will be made of reporting meetings of breeders' associations of all kinds, and its readers will be kept in close touch with the work of the agricultural experiment stations. Subscription price \$1.00 a year, but will be sent during 1906 on trial for TEN CENTS and the names of ten farmers who are interested in Corn or Live Stock. Address Farm & Stock, 139 Charl's St. Joseph, Mo.

BLOODED STOCK FOR THE BUSINESS FARMER

We call the attention of our readers to the "Ad." of the BeSaw Chemical Company in this paper, and particularly to the claims they make in regard to Stock Food propositions. We see no reason why their claim is not fair and worthy of the attention of our readers if they can do what they claim, it is surely a long step toward economy to the feeders.

This house has excellent bank references, and as every thing they sell is guaranteed, we feel that our readers are justified in trying their goods.

A few years ago the plan of selling goods direct to the user at wholesale prices, freight charges prepaid, was not thought of. One of the first large concerns to adopt this plan that we can now think of was the Coiled Spring Fence Company, Winchester, Ind. Ten years ago they started with a small capital, small factory and small business. Now they employ 52 people in their office, 150 people in the fence factory and 200 people in their wire mill. They sell fence on 30 days trial, freight charges prepaid. It can be returned if not satisfactory. They say they can save the money on fence. It would be well for all fence users to write for their free catalogue, which fully describes their line and manner of doing business.

Leslie Duncan Kline, Vanluse, Virginia, writes:—I have about the best herd of Duroc Jersey hogs in the East. I have a boar that I just purchased from Spencer R. Quick and Sons, of Coopers, Ind., by their Golden Glen Chief, one of the very best sons of Ohio Chief, the fellow that sold for \$2000.00 six weeks ago. In addition to this I have an Orion boar that is one of the most typical boars of the breed and a hog of great finish, with tremendous size and bone. I have just purchased from Quick and Sons a sow from High Chief (a son of Ohio Chief) that is with pig by Sure Winner, Jr., and in the same lot I bought the best sow that has come East, J. R. Springer, 3066, due to farrow March 1st by J. R. Springer. Besides these I have a grand lot of sows of Perfection, Topnotcher, Kant-Be-Beat, Longfellow, Go-forward, Washington King and Fayette Chief blood. The entire herd has been selected with a view to type and breeding qualities and after breeding several of the best know breeds for years, I am for the Duroc-Jersey first and last.

Our hogs have splendid ranges and we use the different hog pastures, including clover, alfalfa, soy beans, cow peas, rape, etc., and feed protein foods instead of so much corn and we can grow larger, healthier and better animals, and get larger litters of pigs in this way and what is important at the end of the year, — have more on the right side of the balance sheet.

No Better Illustration can be given of great things coming from small beginnings than Kendall's Spavin Cure. It was compounded and used in a small way about thirty-five years ago, the veterinary, B. J. Kendall in the then obscure village of Enosburg Falls, Vt. Since then the name of Dr. Kendall and "Kendall's Spavin Cure" have gone to all parts of the world. The merits and the merits alone, of the remedy have done it.

While Dr. Kendall was practicing as a veterinary he wrote a little book entitled "A Treatise on the Horse and His Diseases." It is safe to say that no more popular work on this subject has ever been produced down to the present day. It was used originally by the doctor in his practice and handed out to the horsemen with whom he came in personal contact. It is said that now upwards of 12,000,000 of these little books have been published and gratuitously distributed.

The cures of spavin, curb, ringbone, splint, wire, cuts, sores, etc., and the expense and labor saved to horse owners by Kendall's Spavin Cure are beyond comprehension. For the greater part of these 35 years Kendall's Spavin Cure has been the chief, and with thousands of horsemen the only remedy used. It must be remembered that it is not confined to this country. It is decidedly a world remedy. With the little book mentioned above to guide, and with Kendall's Spavin Cure at hand to treat promptly any case of spavin, wound, lameness, incipient bone growth, etc., the ordinary horse owner is well fortified against all the common ailments to which all horse flesh is liable. We believe it to be unquestionably a more efficient remedy and adapted to the cure of more of the ailments to which the horse is liable than any other now on the market.

Another Huge Factory has recently been completed by the Ohio Carriage Manufacturing Company of Cincinnati, Ohio. It is a most wonderful collection of buildings and equipment, but by all odds the most wonderful thing about it is that the whole plant is devoted exclusively to the manufacture of one single kind of vehicle—the Split Hickory Special Buggy, which these people sell complete, for only fifty dollars.

This immense new factory is the only one in the world given entirely to the making of one style of buggy. Not another bit of work of any kind is handled in it. Not a part of any other vehicle of any sort or description is made here.

BLOODED STOCK

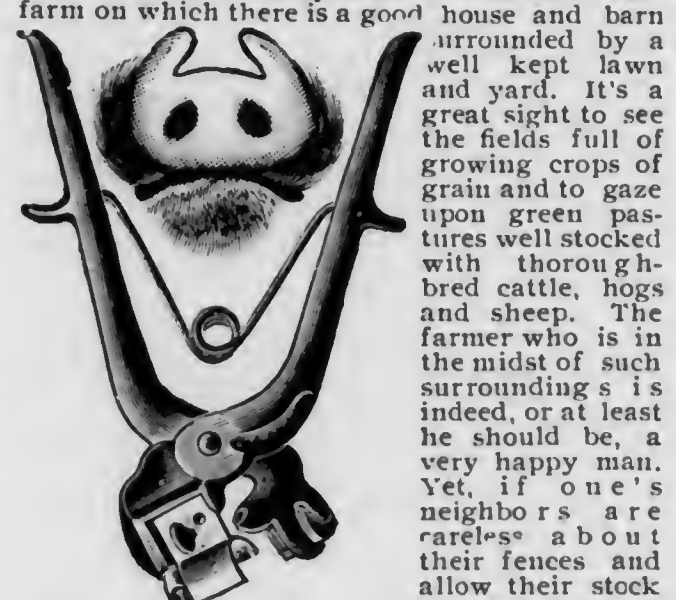
All the men in this factory do is make Split Hickory Special Buggies.

The enormous demand for these buggies which has made necessary the building of this big factory, has been created through a new plan the Ohio Carriage Manufacturing Company have of selling direct to you. They let you use one of their \$50 Split Hickory Specials, with which they give a two year, legally binding guarantee, a month FREE to prove it is all they claim.

If you don't find it so, send it back. The entire policy of this concern is to sell direct and have all the expense of go betweens and unnecessary handling for you.

In their other big factories, the Ohio Carriage Manufacturing Company make Spring Wagons, Surreys, Carriages, Stanhopes, Phaetons, Carts, Driving Wagons and a full line of Harness. All are sold direct to you and all are fully described and priced in the new 180 page Vehicle Book these people have just gotten out. They send a copy FREE to everyone thinking of buying. A simple request brings it by return mail. Address The Ohio Carriage Manufacturing Company, H. C. Phelps, President, Station 8, Cincinnati, Ohio.

An Aid for Stockmen—There is nothing so pleasant to look upon as a well cultivated farm on which there is a good house and barn



surrounded by a well kept lawn and yard. It's a great sight to see the fields full of growing crops of grain and to gaze upon green pastures well stocked with thoroughbred cattle, hogs and sheep. The farmer who is in the midst of such surroundings is indeed, or at least he should be, a very happy man. Yet, if one's neighbors are careless about their fences and allow their stock to wander around

pretty much as they please, especially on others property, it is a cause of much annoyance. Many times your neighbor raises the same breed of stock as you do, although they are inferior to yours in breeding so that when they get out and mixed with your herds, through the shiftlessness of your neighbor in not keeping his fences repaired, you will be greatly troubled (to put it mildly) to tell which are yours and which are his—unless you have marked yours with a good ear marker. Your shiftless neighbor will never mark his, you may be sure.

Again you may have one of the finest pastures in the neighborhood, yet if you turn your hogs out in it without first snoutting them with one of those combined "Never Root" Hog Tamers and Ear Markers, they will soon make your pasture look like a partially plowed field. These ear markers and "Never Root" hog tamers are just what every farmer and stockman needs. They are so handy and easy to apply and are inexpensive. They will last a life time and are the only successful means of preventing trouble similar to that just described. These ear markers are made by the W. I. Short Mfg. Co., Quincy, Ill., and have stood the test of many years' service given them.

ABERDEEN-ANGUS CATTLE BUY A WINNER—A MARKET TOPPER

The Angus cattle have captured more firsts and championships at the great fat stock shows than all the other breeds together. Why? Because they require less feed, feed easier, carry a maximum of the high-priced meats and a minimum of the cheaper cuts and offal, and will invariably outsell cattle of other breeds. We have them for sale of the most popular breeding. Our prices are within the reach of all. We solicit your correspondence and invite you to come and see our stock.

Meissner Bros., - Reinbeck, Iowa.

by practical breeders and farmers. See it advertised on 14 page of this paper.

W. L. Hammond, R. D. 2, Oswego, N. Y.

Breeder of Large English Yorkshire Swine The kind that grow large. Write wants. Prices reasonable.

Durocs Cheap

\$15--Pair not Akin--\$15 Breeding Boars, Bred Gilt and Sows. Short-horns, P. Durhams, Shropshires, Buff, Barred and White Plymouth Rocks. QUICK & SONS, Gosport, Ind.

OAKDALE FARM

Property H. A. DANIELS. R. D. 5, Millington, Mich. Exceptional advantages to introduce our LINCOLN SHEEP CHESTER WHITES to readers of SCOTCH COLLIES this paper. Write your wants immediately. Special offering Scotch Collies and Chester Whites now on hand.

Chester Whites For years I have been selecting and breeding to build up a herd that would be uniform in shape, stamping other herds with the good qualities that I had succeeded in fixing in my herd. If in need of first-class Chesters come and see me or write your wants. Only the best sold for breeders. T. A. STEVENSON, Shannon City, Ia.

ENON HERD CHESTER WHITES Have some extra choice Fall pigs, both sexes. If you are looking for good ones write me. Barred Plymouth Rocks, best strains. Birds for sale. Eggs in season. D. W. SHELLABARGER, ENON, OHIO

Chester Whites I have them combining the best blood in Chester County. If you want the good old Chester that has made this county famous, we have them here that will please you. We breed and sell only the best. Write me. C. L. WEBSTER, Kelton, Pa.

OUR Chester Whites in demand in U. S. and Canada. We have all ages, both sexes. We can't give you A BARGAIN unless you give us an order. Try us once you will order again. Stock worth the price our motto. N. F. KERSHNER & CO., Ansonia, O.

Cost of Food.	5.678
Gain	3.312
Value of the eggs laid by No. 6.	6.736
Cost of Food.	6.018
Gain	.718
Value of the eggs laid by No. 7.	5.936
Cost of Food.	5.814
Gain	.122

Alarm in the Sheep Camp

There has been ill-disguised uneasiness in sheep feeding circles for three weeks past. Feed lot contents have been dumped on the market in half-finished condition in such manner as to create a succession of gluts. Prices dropped 50 cents to \$1 per cwt. and markets have been in deplorable condition. Never before has such a large proportion of the winter mutton crop been sent to the shambles in January. Chicago, Kansas City Omaha, St. Joseph and St. Louis show up with about 816,000 sheep and lambs during the month, a gain of 144,000 over the same period last year. The increase at Kansas City alone was 69,600, owing to free marketing of San Luis Valley stuff. Chicago had 369,922 or 25,792 more than in January, 1905, breaking all previous records for the month with the exception of 1902. The heaviest day's run during the month was 42,000.—Breeder's Gazette.

Feeding Methods Changing. The problem of economical stock feeding is being solved. There was a time (not far back either) when fattening stock, or feeding dairy cows for milk and cream was a "hit and miss" haphazard process; when feeder and dairyman had no idea of the relative nutritive value of feeds. But now, new and radical changes are rapidly taking place. Many wise feeders who are studying feeds and their fattening and milk values find that by adding a condimental mixture like Tonic Stock Food they get happier results all around. Tonic Stock Food is a condimental appetizer and digestant made in four separate formulas for horses, dairy cows, hogs and for general feeding. It puts life, vigor, muscle and bone into farm animals by helping to digest their feed more thoroughly. It makes them more profitable in flesh, fleece, fat, milk. It can be profitably fed with any and all rations. Animals relish the food better when given Tonic Stock Food with their rations. They will digest from 10 to 20 per cent. more and so reduce the feed bill.

This food is made in Elgin, Ill., by the Tonic Stock Food Company, and therefore is properly named "Elgin Brand." It has a very attractive trade-mark—a black circle pierced with an arrow. This brand appears on every package of "Elgin Brand" Tonic Stock Food costs \$3.50 per 100 pounds, freight paid. Feeders and all farmers should send for their booklet full of feeding facts. By addressing Dept. 000 they will also send a handsome souvenir calendar.

Hog Cholera. This is the season of the year that determines the health and thrift of the spring litters. If the sows are put into good condition now their pigs will be strong and healthy when born, and if they are kept in good condition and kept clear of worms their milk will be pure, their blood will be pure, which will cause the pigs to grow off much stronger than they will with the ordinary way of raising them. For this purpose we could not refer our readers to a better remedy than that of the Snoddy Remedy, manufactured by the Snoddy Remedy Co., of Alton, Ill., a remedy which we have often called the attention of our readers to.

This remedy has proven itself superior in the tests it has gone through to anything we have any knowledge of. There is no doubt but it cures hog cholera when plenty of it is properly used. It has saved hundreds of thousands of dollars for the country in the last few years. Dr. Snoddy, the originator of the remedy, will go into the worst outbreaks of disease that ever came and treat the hogs and restore them to health in a few days time. He has done this all over the country and is constantly doing work of this kind. He has a la ge office at Alton, Ill., with a force of help that is sufficient to take care of the business in his absence.

If you will write to the Snoddy Remedy Co., of Alton, Ill., they will furnish you with circulars and testimonials from the best men of our country, and also furnish you their book on Hog Cholera, which contains full directions for the use of the remedy, prices, how it is put up and shipped, also the number of hogs one box

BLOODED STOCK

of it will treat. Every farmer who is interested in raising hogs should investigate this new method of treating the disease. It has been now in use about 12 years and the demand for it has become so great the supply is a greater problem than the demand. Any quantity of it can be sold. Thousands of men who have tried it will not do without it at any price. It is worth your time to write the Snoddy Remedy Co., and get their free book. It is free. It costs you nothing but a postal card to send your name and address, plainly written, then it will be mailed you.

An Evergreen Specialist. In these days it pays to be a specialist. No matter what line or profession in which one is engaged it pays to master every detail and to know that one thing perfectly from A to Z. Mr. D. Hill of Dundee, Ill., has long been known as an evergreen specialist, and a visit to his nurseries at the above named place establishes his right to the title beyond question. For years Mr. Hill has made the study of evergreen culture a specialty with the result that within the confines of his ample grounds are to be found specimens of almost every variety of this beautiful plant. Of those kinds which are in more general demand his stock numbers into the millions, while the most perfect specimens of the less hardy and rarer varieties are also to be found there. To those who have not made the subject a study the large number and beautiful varieties of evergreen is a revelation. Many of these trees are natives of our own country and cover the slopes of the mountain ranges in their respective localities with vast forests of pine, spruce and cedar. There are others which have been imported from foreign countries, some coming from Russia, Switzerland, Japan, Australia and other far distant climes. These trees are among the most useful as well as ornamental plants for wind breaks and landscape effects. For group planting, hedges, and formal planting they are especially effective.

Mr. Hill has given the subject of transplanting and transporting these trees especial attention and his method of digging and packing is such that there is seldom any loss caused by the operation, and the trees thrive and do well in their new locations even though they may have to travel many hundred of miles before being placed where they are to remain permanently. While the Dundee Nurseries are particularly noted for the fine quality of their evergreens they also include deciduous trees, shrubs and other plants usually found in a well stocked nursery. They are prepared to supply orders for almost anything in this line. Anyone contemplating the planting of either evergreens or the other sorts will do well to secure a copy of Mr. Hill's catalog. This book is but recently from the press and is beautifully illustrated and contains full information of value to anyone in need of nursery stock. It will be sent free on request. Address Mr. D. Hill, Dundee Nurseries, Dundee, Ill.

W. C. Ellison, A well known poultry judge and breeder, and contributor to poultry publications, has just accepted a position of assistant manager of the Poultry Supply Department of the International Stock Food Co. For the past three years he has conducted departments in the Poultry Gazette, Progressive Poultry Journal and Western Poultry Journal and during the last year has represented Poultry Success in the field. Mr. Ellison is a thoroughly competent authority, as he has been a poultry fancier all his life and has studied the poultry industry in all of its branches.

A. P. Spencer, B. S., has also joined the International forces and will be a valuable man in his line of work. He has been instructor in Animal Husbandry at the Virginia Agricultural college and has had almost entire charge of the college barn. He has had a wide practical experience on the farm, and with the feeding and breeding of live stock, and was strongly endorsed for his present position by K. J. Davidson, Dean of the Scientific Department, D. O. Nourse, Prof. of Agriculture, and F. W. Hodson, Live Stock Commissioner, Department of Agriculture, Ottawa, Canada.

The International people have the habit of securing the best, and able work will undoubtedly be done in the office work of these two assistants.

The growing interest in forestry in this country just now is regarded as certain. The reference includes interest taken by the farmers and the people generally. The national government is striving hard to stimulate this. The care of trees on the farms is what we want to specially help.

An interesting case of the sagacity of of the Collie dog comes from Scotland. A shepherd was found drowned in a pool on the Thurso River. He had left home in the morning with his dog, which returned home alone, but barked incessantly until he attracted attention, and was followed to the pool where his master's body was found.

A reader says she has tried and failed and asks for advice. There is nothing simpler than raising ducks. Buy good strong, vigorous ducks, one or two years old; give them a creek or pond to swim in, an old worn-out pasture to graze in, and one meal a day of corn meal and middlings made into a soft mash.

The ducklings are delicate for the first week, but after that they are very hardy and are not subject to any of the usual poultry diseases.

When possible, set the eggs under hens, as they make better mothers than the ducks.

The trouble our reader has is doubtless due to the kind of ducks she has. Sell them and order others from a responsible dealer, and she will find duck raising easy.

Contrary to the opinion held by all great breeders from Bakewell's time to the present day, an Ohio breeder wants his ewes fat when they lamb and does not believe in exercise for ewes either before or after lambing.

Purdue Agricultural Experiment Station issued 11,426 bulletins last year, and 9,724 in 1904. Of these Indiana farmers received 8,254, 2,211 went to other states and 197 to foreign countries. Text experiments were made last year in more than 100 different localities in the State, mostly with corn.

POLAND-CHINA GILTS of Sept., 1905, farrow. Good ones by Mo. Black Mischief Maker 3371, the World's Fair Grand Champion's brother, and by Prince Jumbo 33710. Some sales at picking prices. Write before you buy.

A. F. SIEFFER,
R. D. 1, Defiance, St. Charles Co., Mo.

MAPLE SPRING FARM

FOR SALE.—Registered Holstein-Friesian Bull just large enough for service, descended from the best families of the breed, a fine individual.

J. S. WHITEFORD, Whiteford, Md.

Climbing Rose Stock Farm

O.I.C. Herd

Choice pigs of either sex for sale. Choice gilts bred to suit you. Write your wants.

A. G. MURDOCK, Cantril, Iowa.

300 Head Poland-Chinas

Seventy-five Sows, bred, will be sold to make room, price \$25.00 up. Others ready for service. Have a grand lot of boar and sow pigs all ages. No better animals or breeding. This is your chance. Write at once to

CLAUD WILKINSON, - Cynthia, Ind.

OAKVIEW HERD

POLAND-CHINAS

I have the best Poland-Chinas now for sale that I ever owned. 20 Head of March and April Sows sired by "Ohio Sunshine," bred to farrow in April. They are large and strong boned. Choice Aug. and Sept. pigs of both sexes. Spring boars all sold. Write for particulars.

W. H. CRESWELL, R. 3, Cedarville, O.

BLOODED STOCK

Points on Hog Growing.

Through a long series of experiments conducted at Ottawa and Guelph and all over America, we have found that with average price of grains the cost of producing a pound of pork from the time a pig is two months old, or weighs about 30 pounds, until he is six or seven months old and weighs from 100 to 200 pounds is from 4 to 4½ cents a pound. Our experiments go to show that by judicious use of skim milk in connection with the meals or grains, we are able to produce a pound of pork for from one cent to a cent and a half less than where meals alone are used.

To get the very best results it is quite unnecessary and disadvantageous to feed skim milk or whey in the largest quantity. The best results came from where we fed from two or three pounds of skim milk to one pound of meal. With such feed we find our skim milk will replace sufficient meal so that we are really selling it for from 40 to 45 cents a hundred pounds. If we feed our pigs from five to eight pounds a day we are selling it at the rate of 42 cents per hundred pounds. As we increase the proportion of skim milk to meal down comes the value of our whey or skim milk. Where we feed as high as ten pounds it comes to 30 cents, up to 15 pounds we get only about 20 cents, and where we went as high as 25 pounds our skim milk was worth only 10 to 15 cents per hundred pounds.

Wherever we have fed skim milk we have got a very improved article of pork. The pigs have hardly ever been too fat. The skim milk seems to induce growth of the very best kind. In every case where we have fed skim-milk the bacon has been select, and when we killed, it has been in every case hard and very seldom too hard, either.

I was shocked by a farmer in the East who told me he was feeding from 25 to 30 pounds skim milk to every pig. There is a tremendous loss. He is getting only 15 cents a hundred pounds for this skim milk, whereas he may as well be getting 30 or 40 cents, making that much more money and producing that much more bacon, and employing another man and making more profit, because even under conditions as they exist at present you will admit that if you can produce bacon for 3½ cents a pound there is money in it.

You say it costs us a whole lot to get the young pigs. Our experience with the raising of pigs has been that we can keep a good sow in perfect condition a year round for \$15. Estimating the meal at one cent a pound, \$15 will

keep that sow a year, including cost of pastures and allowing so much for cost of building and everything else, barring the labor, which is not included. From the average sow we may anticipate eight pigs if she gives only one litter, and that reduces the cost of the young pigs below \$2. If she gives two litters, it costs somewhere around \$1

a pig. If you add \$1.50 a pig to \$7, which we say is the cost of a 200-pound pig, you get \$8.50, and the very lowest price we have got this year has been \$10. There is still \$1 clear profit and the manure that comes from the pig is of a very superior quality.—Prof. J. H. Griesdale, Ontario Agricultural College.

A. Buchs & Sons, Elizabethtown, O., are advertising a fine lot of hog troughs that are worthy of the attention of everyone. It will pay you to get their catalogue.



A 3 TO 4-MONTHS OLD PIG, EXPRESS PAID,

in exchange for a few days of your spare time. You invest no money. Get particulars at once.

PENNA. BERKSHIRE CO., FANNETTSBURG, PA.
Improved Large English Berkshires.

STONE HOUSE STOCK FARM. N. H. Hood, Adrian, Mich.

BREEDER OF THE WORLD'S BEST O. I. C. SWINE
and SHROPSHIRE SHEEP.

Stock for sale at all times of the most approved strains. Satisfaction guaranteed. I have a select herd of quality and shall be pleased to supply the wants of any breeder or farmer who appreciates the best obtainable. Write me your wants before buying. Come and see me when you can. Call at Dr. Gibson's livery; carriage at my expense from Adrian.

STRICTLY PRIME LOT OF GILTS AND BOARS

from the best of breeding. Nothing but tops shipped. These gilts and boars are nearly all sired by my Bold Baron and out of some very choice English and American bred sows that are known to be the best breeders. Write me and state what you want and I will please you. The Clover Leaf Herd of Berkshires are famous for their extremely good quality and individuality.

CLOVER LEAF FARM, STANLEY, N. Y. E. E. HALL, Proprietor.



SEND 3 PEDIGREES FOR RECORD AND \$1.00. Will Register any breed Swine once at this rate to show you our way and Save Your Dollars, make lasting friends, patrons, members. Write us of your business fully. Save 40 per cent. in fees alone. We send you complete information free for asking. U O to know what others know. Memberships, all departments, only \$5.00. Lowest Fees. We will exchange membership with any other Association at par value free. Now consolidate your business with us. Every breeder sending \$1.00 as above this month will also get this paper free to January 1, 1907. Be Prompt To-day.
International Consolidated Record Association, Penn Yan, N. Y.
Wear badge pin—\$1.50 per paid.



I OFFER....

3 Fine March Boars
2 Fine April Boars
1 Fine June Boar.

A few choice Sows ready to breed and a lot of September and October Pigs. I think them as good a lot as any person can show. Write me.

J. H. YARNALL, Kelton, Pa.

150 CHOICE CHESTER WHITE PIGS

Now on the farm for sale.

Our 20 years of experience aids us more and more in securing the best to offer you. We sell largely to old customers, who have learned by past experience that they can get high quality and just what they want. can't here describe what I have but write for our large illustrated catalogue, giving breeding of herd, which you will see is the best.

JAMES FISHER, - EASTMAN, WIS.



THE MOST GIGANTIC CONTRACT EVER MADE

A PROPOSITION TO MAKE THE FARMERS AND FEEDERS OF U. S.

\$18,000,000.00 MORE PROFITS YEARLY

210,000,000 Horses, Cattle, Sheep, Hogs in the United States today and valued at \$3,000,000,000.00. Last year there was spent for Stock Foods, Condition Powders and Veterinary Remedies for these same Live Stock \$20,000,000.00 or about 10 cents per head; therefore we hereby enter into this contract by and between ourselves and the feeders of the United States and do pledge ourselves under positive guarantee to produce as good or BETTER RESULTS for only 1-10 the above amount, thereby saving to the feeders a clean PROFIT of about \$18,000,000.00 per year. Why should the people pay 7 to 15 cents a pound for these remedies or stock foods, shown by analysis to be about 90 per cent "filler," chiefly cottonseed hulls, bran, etc., when

ARABIAN STOCK AND POULTRY FOOD TABLETS

all active principle and made from extract of seeds—a positive guarantee in every box—has been tried and tested for years and is recognized as The World's Favorite Food Tonic and Regulator for

A Common-sense Price, at 1 Cent a Pound--Prepaid.

A Common-Sense Regulator at a Common-Sense Price—1 Cent a Pound.

OHIO PEOPLE SAY:

"Would not do without them for ten times the cost."

"Regard your tablets worth fully a dollar apiece to me."

"Ten cents worth of Tablets mixed with ten cents worth of feed will produce for me better results than fifty cents worth of feed alone."

WRITE US for "What Thousands of Satisfied Customers Say."

BeSaw's Arabian Stock Tablets Always Speak for Themselves—Try Them.

"I was skeptical until I tried them myself, and now I say THEY ARE RIGHT."

In order to get our goods introduced and fed by every feeder in the United States we are offering special inducements to agents and others who will send us a club order from your friends or grange.

100 POUNDS FOR \$1 GUARANTEED. Send us a trial order and get our liberal terms to active agents.

MANUFACTURED ONLY IN U. S. AND CANADA BY

DEPT. H.,

THE BESAW CHEMICAL CO. AGENTS WANTED

SCHOFIELD BUILDING,

CLEVELAND, O.

Arabian Horse Tablets, 1c each

Arabian Cow Tablets, 1c each

Arabian Sheep Tablets, 1c each

Arabian Hog Tablets, 1c each

Put up 100 to a Box Only

Arabian Poultry Tablets, 1c each

Put up 50 to a Box Only

Prepaid and Guaranteed

We will give you full price for the empty box if not as represented.

MAKE YOUR OWN STOCK FOODS

Crush one ARABIAN TABLET with the fingers and mix it with a pound of bran, chop, corn meal or whatever you may have and add a little salt and we will guarantee you have a pound of as good Stock Food as ever sold in the market and at a cost of only 1 CENT and not 7 to 15 cents.

Note that we are backing our guarantee with cash, and gladly refer you to banks or commercial houses as well as more than 200,000 feeders who have made the test and are satisfied.

FOR HORSES, CATTLE, SHEEP, HOGS, POULTRY

Reference: Union National Bank, Dime Savings and Banking Co., Cleveland Trust Co., Cleveland, Ohio.

A MARK HERE means that this paper is sent to you as a sample copy. We wish you to look it over and we feel that you will find it one of the best live stock papers you ever read. Below you will find our subscription offers and trust to be favored with your order.

SUBSCRIPTION BARGAINS

- No. 1. Single subscription, 25c a year.
- No. 2. Send four new subscriptions at 25c each for one year and get your own subscription advanced one year, free.
- No. 3. Send us \$1 and have your subscription advanced 5 years.
- No. 4. Send us \$1 and have your subscription advanced four years and get your choice of recipes for Scours and Thumps or Plans for building a Hog House.

CLUBBING BARGAINS

Successful Farming, Des Moines, Ia. This great agricultural paper has won a name in the corn development now going on in the West. How to select seed, how to plant, how to cultivate so as to increase the bushels per acre is important to every farmer. This paper and Blooded Stock both one year for 40c.

Agricultural Epitomist, Spencer, Ind. is a great monthly farm paper printed out on a big 320-acre farm, where experiments are conducted by experts and the results published in the paper. This makes it a paper of great value to the business farmers who want to keep posted on the best and latest methods. This paper and Blooded Stock both one year for 40c.

Farmers' Voice, Chicago, Ill., is one of the finest illustrated farm monthlies published. It is a regular family paper, concerning not only the farm topics but also the household, making it one of the most valuable papers printed. Every issue is worth the subscription price. This paper one year, along with Blooded Stock, for 65c.

All three papers, along with Blooded Stock, one year, for \$1.00.

You cannot get a better combination of valuable information than this offer, for the money, anywhere. Send your order at once to

BLOODED STOCK, - OXFORD, PA.

When it comes to converting feed into meat the hog stands pre-eminent.

It pays to feed the growing pigs all the wholesome food they require.



Best Fruit Paper Free

Send your name and the names of two friends who grow fruit, and we will send you 3 sample copies of the best fruit paper published, and will tell you how to get our ten fruit books without cost. Address Fruit-Grower, 325 So. 7th, St. Joseph, Mo.

Here's a Subscription Proposition That Can't Be Beat.

More Real Value in Brains and Beauty Than Has Ever Been Dished Up Before.

	Regular Price	Send
"The Book of Live Stock Champions".....	\$1.50	\$1.50
"Irrigation" one year.....	1.00	to
"The National Farmer and Stockgrower," one year.....	.50	"Irrigation"
		and you
	\$3.00	Get Them All

"THE BOOK OF LIVE STOCK CHAMPIONS" is a cloth-bound, gold stamped volume of 240 pages and weighs 24 ounces. The features about it is that it contains handsome half-tone engravings, printed on heavy plate paper, of cattle, sheep, hogs, horses, ponies and mules that have taken championship prizes in the United States since 1900. Full descriptive matter accompanies each illustration. There are 500 of these beautiful studies, every one of them fit for framing. They are the quintessence of the photographer's and engraver's art. It is up to date—the edition of 1905. It is the only work of its kind extant. It is the kind of a subscription premium proposition to which "Irrigation" patrons are entitled, for they get the best for their money when they buy "Irrigation" and this is a gift of appreciation for that patronage. Every lover of live stock, every student of live stock will be losing valuable and indispensable information should he fail to possess a copy of this book.

"IRRIGATION" is the best—because the most practical—monthly farm magazine published in the West. Its pages are filled with articles that will benefit every man, woman and child who prefers to live next to nature in the Great West, to till the soil, to be independent of the rush and roar of the maddening cities—it tells them every month how to apply water for irrigation to their land; it tells them how to prepare their ground, how to build their ditches; it tells them how to conserve the moisture for "dry farming" in sections where irrigation is impossible; it tells them what kind of seeds to plant for grain in the semi-arid sections so they may harvest bountiful crops; it tells them what other classes of products to give their attention to, so that they may prosper, without spending years in experimenting, in their new country. It is a magazine of profit to the subscriber.

"THE NATIONAL FARMER & STOCKGROWER" is one of the old established farm journals of the Missouri river country. Very ably edited by one of the ablest writers in his line—Mr. Phillip H. Hale. It is now in its fifteenth year, and like good wine, has improved with age. There are within its sixteen pages of five columns each all sorts of good reading for the farmer, his wife and his children. It is a fitting companion to "Irrigation" and wear pleased to offer it in a clubbing arrangement.

So We Say Again—"Irrigation" Herewith Offers the Best to Be Obtained Anywhere for the Money.

Send \$1.50 in Post-Office Money Order, Express Money Order or Stamps (Not Checks)

Your name goes on the list of "Irrigation" and the "National Farmer and Stockman" for One Year and inside of ten days from receipt of the Money you will receive postpaid a cloth-bound, gold stamped copy of "The Book of Live Champions." Address

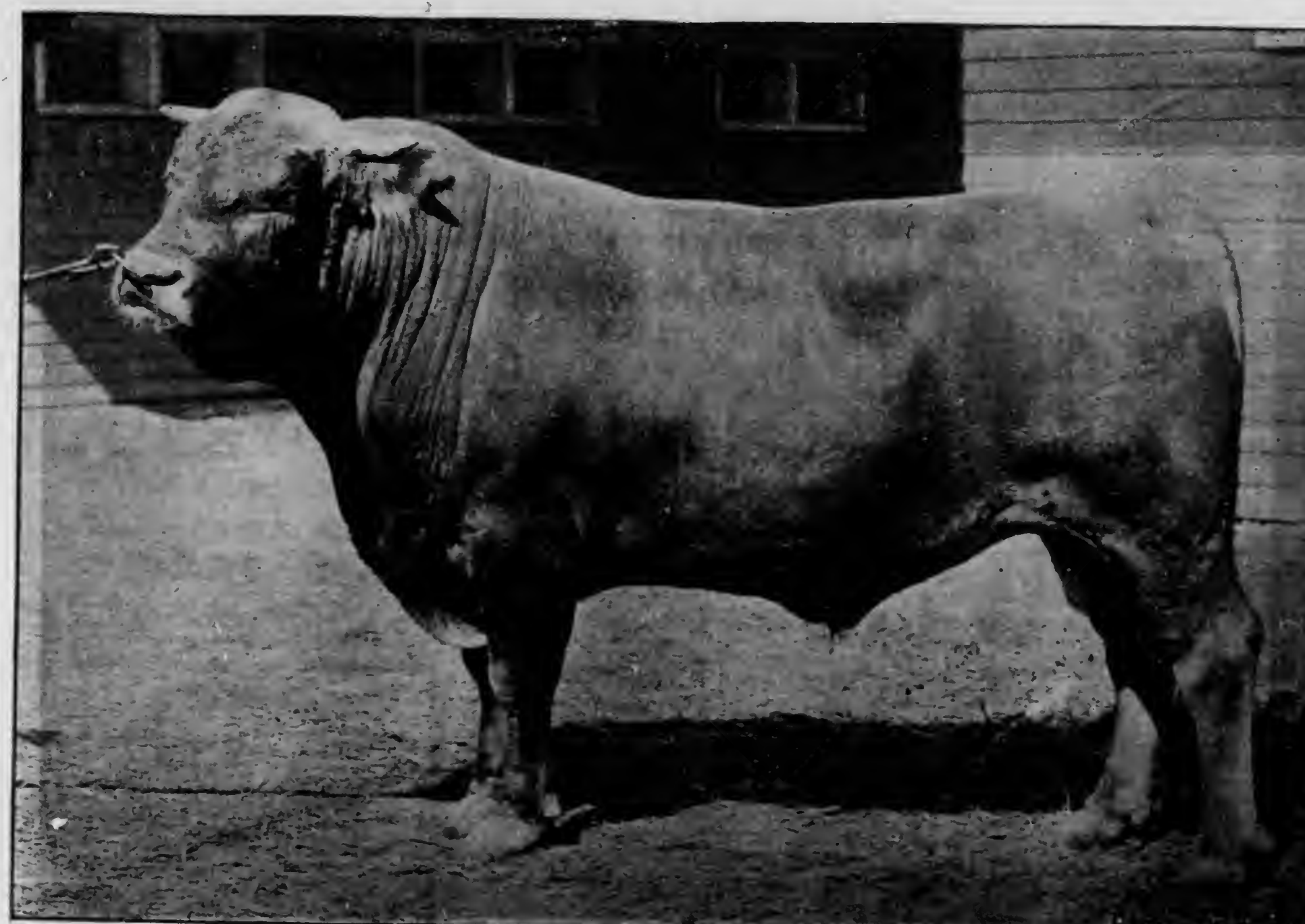
IRRIGATION PUBLISHING COMPANY, 600 Club Bldg., DENVER, COLO.



VOL. XII.

OXFORD, PA., APRIL, 1906.

No. 2



Brown Swiss Bull, "Upland Hobby."

First at St. Louis. Owned by F. R. Hazard, Syracuse, N. Y.

Danish breeders have a very sensible system in regard to their breeding bulls. They aim to keep a bull that has proved himself of merit as a sire until he has reached the maximum age. An aged bull is not sacrificed as he would be in America. A bull there is not eligible to registry as a pure-bred until he is three years old and has proved himself a useful sire. In the United States on the contrary, a bull that is over three or four years old is usually sold at a great sacrifice, especially if he is a pure-bred. Farmers and breeders eagerly seize upon the

young bull if he shows the least merit in conformation and quality, although he has absolutely no record as a sire. At a recent public sale of pure-bred cattle a splendid aged bull that had a splendid crop of calves to attest his merit as a sire could not be sold, as no one seemed to care to chance a bid on him. On the other hand young bulls, even under yearlings, brought ready sale at fair prices. This sacrificing of old bulls is a senseless practice and would-be purchasers should show more judgment than to let a good sire go begging.

Not long since mutton was anything but a popular dish with the American consumer; now it is found on many tables. Especially in the east it is a favorite. New York consumes 83,000 carcasses weekly. Boston the heaviest consumer of mutton on basis of population in the world, while Philadelphia is a close second. These three cities consume a vast number of sheep and lambs annually, a fact largely responsible for \$1 lambs and \$5.50 sheep at Chicago at this season—prices heretofore unheard of.

Horse Breeding in Virginia

An all-wise Providence, geographically in the forefront, and made her soil second to few States in this grand Union, but the D— created the slave trade, and afterwards, a civil war that devastated the Old Dominion, which pulled us down from one of the leading States to one of the last. Thanks to the people who cannot be kept down, but who, like "truth crushed to earth, will rise again," we are fast regaining that position due us for the reasons given in the first few lines of this article.

Now the battle cry and slogan is "On to Virginia and the front, young men," instead of "Go West, young men," and the young men are answering that call. Our people are, by their love for the old State, and with the help of reinforcements from other States, regaining lost ground and pushing to the front.

With our climate, land and other natural advantages, why shouldn't Virginia be in the front ranks?

Heretofore, tobacco has been, in a great many sections, the main crop; no stock to make manure and enrich land, but throughout this, the great Shenandoah Valley, the Southwest and certain

parts of Eastern Virginia, the lands are being enriched, as well as the farmers, by keeping good stock and feeding the products of the land on the farms. Number of farms in the State have been made profitable and fertile by stock raising. In writing of profitable stock raising, it is unnecessary to mention that failures on stock farms are not unheard of, for such cases are occasionally noted, but they are rare; but never have I seen or heard of a failure of a man or firm who bred and raised draft horses, and the reasons are obvious to one who will study and note the conditions of the market, and the light expense, comparatively speaking, of raising and fitting such stock for the market, says John F. Lewis in the Southern Planter.

In breeding and raising good draft horses, the big draft horses do all the work on the farm and raise a colt each year. The cheapest labor can be employed to work the mares and break a draft colt for market, while the breeder of the lighter kind has to keep the mares from year to year almost without sufficient employment to pay one-third of the cost of keep, and the labor necessary to handle and break such

horses for the market is "skilled" and, consequently, high priced. Again, the produce of the heavy drafter can be sold at three years old and under to farmers, if not to regular shippers, at figures much higher than those of the lighter classes, and the certainty of getting what you breed for from heavy draft stock is almost assured, while on the other hand, the breeding for speed, high steppers, hunters, etc., is an uncertainty, a gamble. A blemish, no matter how slight, will not be overlooked or tolerated by a dealer in light horses, while a blemish that does not render a horse unfit for draft purposes will not materially affect the price.

Another feature that is to be considered in breeding for profit is this: the draft colt is not near so nervous or gay, and not as liable to injury in the field, barn or harness.

The speed and sporting horses should be bred by the millionaire who is farming for fun. "Let the shoemaker stick to his last," should be remembered by the farmer who is farming to support his family and educate his children and leave a home.

The better bred the stock, the more profitable, goes without saying.

Will Sheep Pay?

The high price of mutton and sheep is causing many farmers to ask themselves this question, "Shall I go into sheep?" The question is answered by an Iowa sheep farmer as follows:

"For the last ten years we have been urging the farmers in the corn and grass states to keep a few sheep. It is not worth while to bother with less than twenty-five head, and that number is enough for the new beginner. If he follows our suggestions these sheep will increase quite as rapidly as the ability of the ordinary farm to handle them. We need not go into details as to why we have urged this policy. Those who have adopted it have made good money, and by reason of experience acquired will make more money in the future, and more money than those who are going into it now. They have learned by experience, which is the only way in which a man can learn how to handle sheep. Whether a man should go into sheep depends largely on himself and the character of his farm. In favor of going into it in this small way we might call their attention to the fact that the high prices for mutton and wool will probably continue for several years to come. There has been a great reduction in the number of sheep over almost the entire world. That is the reason why wool manufacturers and importers are even now in the field contracting for the clip of 1906. In the last four years the supply of sheep in the United States has fallen from 64,000,000 to something like 47,000,000, a reduction of nearly 25 per cent. An even greater reduction has taken place in Australia as a result of drought. The sheep stock of European countries has likewise declined, but not in the same proportion. Therefore, the man who goes into the sheep business has reasonable assurance of high prices for some time to come."—Wool and Cotton Reporter.

FOR SALE—Holstein Bulls, all ages up to one year from cows that have records up to 30 lbs 12oz of butter in 7 days. Are richly bred and good size. **Chester White Boars** ready for service and young pigs either sex at farmers' prices. **S. F. WILLIAMS**, Canton, Pa.

Primrose Herd Large English Yorkshires.

From Imported Stock. Second to none. Write wants. **A. A. BRADLEY**, Frewsburg, N. Y.

CHESTER WHITES AND POLAND-CHINAS.

20 choice Spring Sows, open; 25 Fall Pigs, both sexes, and also some very fine yearling bred sows that are extra fine and were prize winners last Fall. 12 head Poland-Chinas from 8 to 12 months old. I never had a better offering in young sows than this.

C. R. CRESSMAN, Bursonville, Bucks Co., Pa.

GREENWOOD STOCK FARMS

Farmers and Breeders I now have a large stock, probably the best I ever owned. Cannot tell you all here, but I have Boars and Sows, all breeds, to 6 months old, sows bred, boars ready for service, all from prize winning stock. Guernsey and Jersey Cattle. Buff and Barred Plymouth R. Chickens. Farms and Residence, Greenwood, Pa. Address **C. H. DILDINE**, Rohrsburg, Pa. Route No. 1.

Bargains in Poland-Chinas, Berkshires & Chester Whites

I now have a large stock of probably the best I ever owned. Cannot tell you all here, but I have Boars and Sows, all breeds, to 6 months old, mated not akin; sows bred and boars ready for service. Guernsey Calves and Registered Scotch Collie Puppies. Write for prices and free circular. This stock must go and will be sold. **M. B. Turkey**, Barred and White P. Rocks, Brown Leghorns for sale. **P. F. HAMILTON**, Cochranville, Pa.

BLOODED STOCK

FOR PRACTICAL STOCK BREEDERS AND FEEDERS.

PUBLISHED MONTHLY AT OXFORD, PENNA.

UNDER EDITORIAL MANAGEMENT OF C. E. MORRISON.

Questions—Subscribers of the paper are at liberty to ask questions on any subject concerning which they desire information, and these questions will be answered as promptly and carefully as possible, either through the paper or by mail. When asking for information always enclose a 2-cent stamp for postage in case an answer by mail is necessary.

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Establishing a Type

Address by P. W. Peterson, Vermillion, S. D., before the American Poland China Record Association, Cedar Rapids, Iowa.

My subject for discussion is, "Breeding to Establish and Maintain a Type." On the outset I want to say that the establishing and maintenance of a type is one of the most essential points in the breeding of pure-bred live stock, and it is the key to success in the breeding business.

The breeder that mates his stock with the sole idea of reproduction is not an improver of any breed whatever, and as a usual thing he never makes much of a success in his business. He breeds them more by instinct than by knowledge of the characteristic of the blood lines contained in his animals, and as to the character of the offspring from the mating of such blood lines.

We have heard very frequently the statement by people that were sincere in their statement, and believe that "like begets like," but how many of them have not been disappointed in their anticipations in this respect, and why? Why is it that like will not beget like?

One reason is that an animal can be fed so as to lose all resemblance of the family that it represents, but it cannot be fed so as to lose the hereditary blood lines which it possesses, and whenever mated with another animal that has to some degree some similar blood lines, the offspring will, in type and general build, resemble that of the family which has the highest per cent of the same blood in the sire and dam.

The second and most essential reason is that where the dam possesses to a great extent some particular family blood line and the sire only a small part of the same blood line the percentage in the blood of the offspring will be that of their dam, and they will be the type of those ancestors that represents that blood line. On the other hand, where the sire represents to a larger degree some special blood line and the dam only a small part of the same, but enough of some other blood line—enough so as to give her entirely a different type from that of the sire—the offspring will represent the type of their sire, and they will all look alike as to general build and appearance, providing, however, that the constitutional vigor of the sire and the dam is on an equal at time of the mating.

In this matter of equality in constitutional vigor, it takes the keenest of observation and good judgment to ascertain whether the animals are in condition at the time of mating so as to impress their offspring with the type desired by their owner. This knowledge can only be obtained by personal observation and experience; it cannot be learned from books or from the teachings of others by words.

The strength of prepotency of an animal is so very often misjudged by all of us. But we have all found that the animal has been more prepotent one time than another. For this there is some cause, but there is no law or rules that can be applied to the cause of these different conditions.

It is generally supposed that the slick, smooth, fat appearing animal is very prepotent, but that is not always the cause. Sometimes we have breeding animals that are overburdened with fat and taxed too much in carrying the extra fat and this burden has taken too much of their strength and vitality, and consequently has reduced their prepotency.

We can take the hogs, for instance, when they came back

from the fairs where they have been on exhibition, and as a rule have been fatted to the highest safe point possible, these animals are not in the best kind of condition to breed to establish a type, for the reason that their constitution has been overtaxed by carrying this surplus amount of fat and they have to a certain degree lost their environment and consequently are not as prepotent at this stage. If mated to other animals in the pink of breeding condition, the offspring will all resemble the latter regardless of the blood lines contained in the first, and in breeding such animals of which I speak, where the conditions are so different, is where we meet most of our disappointments as to uniformity in the offspring.

On many other occasions we have found that where two animals have been mated, where the percentage have been on an equal in both the sire and the dam, in representing several different types and styles of families, that their offspring differ in type and show no signs of resemblance. Take, for instance, a brood sow that has been so mated, and you will find that her pigs resemble no type whatever, but will resemble nearly as many different types as she has pigs in the litter. And how many times have we not heard men say that "this sow has such uneven litters I don't know what is the matter with her," when in fact there is nothing the matter with the sow at all. The only thing that is wrong in this case is that the man mates her with no other idea in view than reproduction, and mates her not knowing that all the blood lines contained in both the sire and the dam are on an equal and are constantly at war, and as none of these different blood lines are superior, the consequence is that the litter will be very uneven, and when mated the pigs will resemble no particular type—they are just hogs.

In conclusion will say that it is absolutely necessary in order to establish and maintain a type to mate such animals whose blood lines are not foreign to each other, but which possess enough of the blood lines in common of the type that is to be established so as to transmit the largest percentage of that blood into their offspring.

Now, gentlemen, I do not want you to think that you must inbreed in order to establish a type, but you must to a certain extent linebreed, and you will find that the greatest breeding animals of any breed that we have had, that have been the most uniform breeders, were line-bred animals.

This cry of outcrossing is detrimental to any breed, and has a tendency to destroy the good quality that the animal of family possesses.

OUR PRINT SHOP

Our readers will be surprised to know some of the things that are done around a place like a printing office such as we have to print Blooded Stock. In fact we wish that we could show our readers around and have them see the great amount of work done in such a place.

We have just placed an order for a great type setting machine that will do the work of seven men at cost of nearly four thousand dollars. Our presses turn out several thousand printed sheeted each month which has to go through several hands before it is finished.

We finished up during March a handsome catalogue for The Cona & Jones Company, West Grove, Pa., the largest rose growing firm in the world. A nice lot of printed matter for Hodgson Bros, New London, Pa., breeders of Scotch Collie dogs. An immense amount of printed matter for William Caramel Co., who manufacture three to four car load of candy every week. P. F. Hamilton, Cochranville, Pa., had several thousand circulars and catalogues printed and we are now doing a lot of printing for A. J. Reach, Philadelphia, Pa., who employ over two thousand hands making baseballs and other sporting goods.

We are ready to do your printing. It is the catchy printing that pays. When you have printing to do get the kind that attracts attention. That is the kind that makes your new sales and brings you new customers. Send us your works. Let us get you up something that will be a little different from the common kind. We can make your engravings. Write us about your work.

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Renew your subscription promptly. Advertise your stock in Blooded Stock. Confer a favor on us by always mentioning Blooded Stock to advertisers.

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TOP BUGGY, 2 year guarantee. Sold on 30 days Free Trial. Guaranteed solid rubber tires. Worth 50% more than we ask. Write us what style vehicle you need. 1906 Catalogue free. Send now. The Ohio Carriage Mfg. Co., 112 E. Third St., Cincinnati, O.

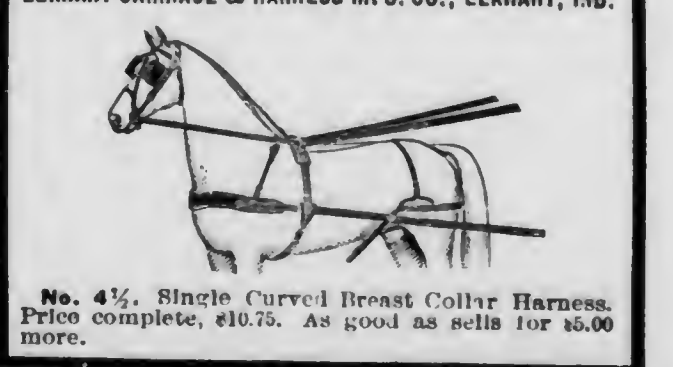


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No. 4 1/2. Single Curved Breast Collar Harness. Price complete, \$10.75. As good as sells for \$15.00 more.

4 BLOODED STOCK Some Things in Cross-Breeding

Address of W. D. Hoard before the Pennsylvania Stockbreeder's Association.

Underlying everything in cattle breeding is the element of temperament. To define temperament, call it an inherited tendency of function. One class of cattle inherit a tendency to motherhood in an enlarged degree; these we define as belonging to the milk and butter temperament. Another class inherit a tendency toward flesh making; these we define as belonging to the beef temperament, you decrease the flesh making tendency and heredity, and vice versa. It is so in horses as between the speed temperament and the draught temperament. For fifty years the Shorthorn cattle in this country have been bred steadily to establish the beef temperament. In all that time I have never heard of a Shorthorn sire, which received a premium at a cattle show because of showing that he inherited, or possessed, the dairy form from which, it might be supposed that he would beget cows of a dairy quality. So determined have been the Shorthorn breeders to extinguish all dairy qualities from their cattle, that they universally judge no sire to be of standard breeding that does not show in form and outline that he is of the decided beef temperament.

Yet with all this strong determination, to breed as far from the dairy temperament as possible, our Shorthorn friends are continually talking of "Shorthorns from a milking strain."

This bold contradiction of all established principles in breeding has caused me to say what I have said for many years on this subject. Is it consistent to steer North and claim we're going South? Is it consistent to breed sires absolutely for the transmission of the beef temperament, rejecting all that show any approach to the dairy form, and then claim that we are producing a "Milking strain?"

The result of this inconsistent and illogical juggling with fixed principles of heredity is to the effect that the Shorthorn breeders have deceived themselves and have thus misled a great host of farmers throughout the land into buying beef bred sires with which to produce profitable dairy cows. These farmers wanted the best possible cow machine they could get. Dairy expense is too great to take up with any other, with a hope of profit and economical production.

The organization of creameries and cheese factories all over the land makes it possible to look into this question, as well as many others that affect the well-being of the dairy farmer. This has been done by the aid of the Cow Census. "Hoard's Dairyman" has been at this work for several years until its files contain a large number of these special investigations into the workings of over twelve hundred herds supplying milk to creameries for twelve months, in the states of Vermont, Connecticut, New York, Pennsylvania, Ohio, Indiana, Iowa, Wisconsin Minnesota.

In the states of New York, Ohio and Wisconsin, several of these Census investigations, numbering several hundred herds in each state, have been taken. The breeding of every herd, or rather cross-breeding, is given as well as the amount of milk, the butterfat test, the final earnings per cow at the creamery and the amount of gain, or

loss, for every dollar expended in feed. Also an inquiry is made as to the mental status of each farmer, his methods of management, his state of intelligence, what he reads and how he feeds his mind, as well as his cattle.

From out this mass of testimony, which as yet has been but very slightly summarized, one would think at least that very valuable data could be obtained on which to build some judgment as to the pro and con of cross-breeding.

Take for instance, the last Cow Census taken in Minnesota, which has just been closed in the Dairyman, and see what it tells of this work of breeding and cross-breeding.

The one hundred herds enumerated contained an average of ten cows each, or a total of one thousand; of these, we make the following classification:

One herd pure Shorthorns; 38 herds grade Shorthorns; one herd of Jerseys; 9 herds of Jersey and Shorthorn cross-bred; 9 herds Holstein and Shorthorn cross-bred; 4 herds of Guernsey and Shorthorn cross-bred; 2 herds Brown Swiss and Shorthorn cross-bred; one herd Shorthorn and Red Poll cross-bred; 2 herds of Shorthorn and Hereford cross-bred and 20 herds of so-called "Mixed," which I have placed with the "Natives," making 21 in this classification.

The records show in this practical creamery work that of the 38 herds of Shorthorn grades, 14 of them made a loss at the creamery ranging from 32c per cow to \$10.51, or an average loss per cow of \$3.79.

The remaining 24 herds of grade Shorthorns made a gain at the creamery, ranging from \$1.70 to \$24.18 per cow. The average profit per cow of the 24 herds was a fraction over \$10.26. The purebred Shorthorn herd gave a loss of \$5.20 per cow.

There was one herd of Jerseys

numbering eleven cows, which showed a profit of \$19.72 per cow; 2 herds of grade Jersey and Shorthorn cross that gave a loss respectively of \$5.18 and \$7.58 per cow. The seven remaining herds of this breeding, made a gain respectively of \$2.61 to \$30.63 per cow.

There were nine herds of the Holstein and Shorthorn cross. Of these, two make a loss, respectively, from \$1.21 to \$7.44 per cow.

The nicking of Holstein and Shorthorn, by these records, does not appear to be as successful as that of the Jersey and Shorthorn.

The four herds of Guernsey and Shorthorn show a loss in one herd of \$6.84 per cow and a gain in the other three from \$1.20 to \$10.65.

The two herds of the Shorthorn and Brown Swiss cross, show a gain, respectively, of \$1.80 and \$2.05 per cow. This cross does not indicate a very strong dairy prepotency on the part of the Brown Swiss sire. There was but one herd of the Shorthorn and Red Poll cross. This herd made a gain of \$19.14, which was very creditable indeed, but there were not enough herds of this breeding to give a comparison of tendencies or direction of temperament. The breeding on both sides in these families is strongly toward the beef temperament.

The two herds of Shorthorn and Hereford cross both gave a loss, one of 49c and the other of \$2.16 per cow.

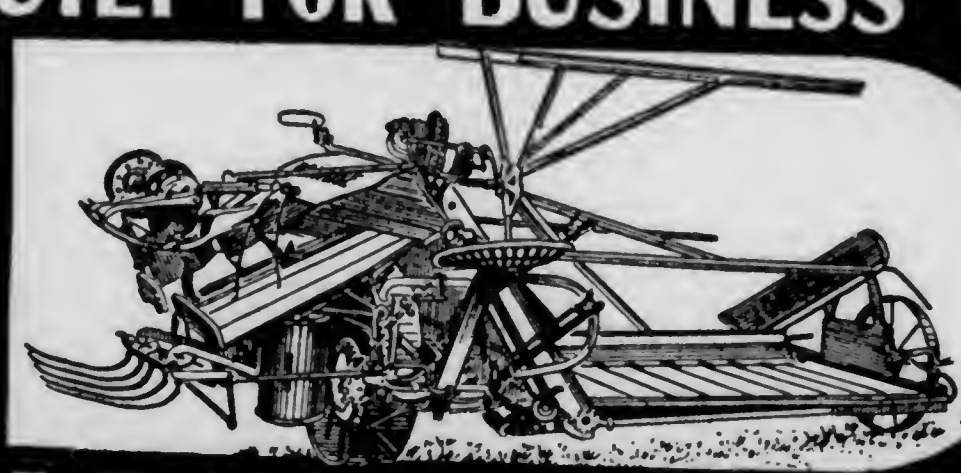
We come now to an interesting study of the universal cow of this country, so called the "Native."

The twenty-one herds classed as "Natives" gave results as follows: 10 herds showed a loss ranging from 83c to \$6.61 per cow, or an average loss for the ten herds of \$3.00 per cow.

The remaining 11 herds showed a gain ranging from \$3.46, with the highest score of the one hundred herds, that of \$37.85 per cow.

(continued on page 8)

BUILT FOR BUSINESS



THE JOHNSTONE

"BONNIE" BINDER

Bonnie Binders have every practical device for cutting, elevating, tying and binding light, heavy or tangled grain under all conditions. The Bonnie is the only successful low elevator binder made, and will take up grain when others will not. The reel may describe a complete circle in adjusting or may be adjusted horizontally, using one lever for both motions at will of operator. From drive wheel to bundle carrier the Bonnie is built for strength, lightest draft, accuracy in tying and tripping bundles as well as ease of operation. The Bonnie is a right-hand binder with all right-hand levers. Drive wheel and grain wheel have dust-proof roller bearings. The Bonnie Folder explains all working parts in detail, and should be read by every man who has grain to cut. Sent free with our 1906 catalogue illustrating the complete Johnstone line of "not in the trust" Farm Implements. Write for it today.

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GET READY FOR HARVEST Do It Now

The Way To Get Ready For Harvest

It is not enough to grow a good crop. You have to harvest it, before you get your profits. And your profits now depend very largely upon the way you harvest it.

A worn out harvesting machine, or one that is not very good, even when new, may delay you long enough and waste enough grain, to turn your profits into loss. It is a mighty poor policy to grow a good crop of grain and then let a part of it rot in the field.

It does not take a great deal of waste to eat all your profits. It may be only a spoonful of grain at a time but it counts.

Don't Waste. You can't afford it, and there is no necessity for it. Get ready for a profitable harvest. Do it now, while you have time.

Here is the way: Go to an International Harvester Company of America dealer and ask him for a catalogue of the machine he handles.

He will be pleased to give you the book—and you will be pleased to get it.

He will be pleased to show you the machine—and you will be pleased to see it.

You will find the book extremely handsome, well illustrated with good pictures, interesting from start to finish and full of good, common sense about harvesting machines.

But more important, you will find a good harvesting machine.

That is what you are most interested in for that means dollars and cents to you.

We take it that you want a harvesting machine—that you can depend upon to see you through the harvest without break or delay;

—that will save you the greatest amount of time and labor and worry and trouble in the busy harvest days;

—that will harvest the grain you have grown with the least possible waste;

—that will not go to pieces after cutting a few hundred acres;

—that will be easy on your team;

—that you can get repairs for easily and quickly when you need them;

—that will, in short, give you thorough satisfaction in every way—doing for you everything that you can in reason expect a harvesting machine to do.

If that's what you want, all the more reason for looking up the agents of the International line,

You know the line—the six leading makes of harvesting and haying machines, used wherever grain and grass are grown:

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Better harvesting and haying machines cannot be made.

As good harvesting and haying machines cannot be made without such facilities as the International Harvester Company possesses.

Such facilities are made possible only through the co-operation of the manufacturers of these several lines of machines.

It is co-operation which enables them to produce from forest and mine their own raw materials—and thus be independent of uncertain and fluctuating markets. Acting together, they own, control and operate their own coal and iron mines, their own coke-ovens and steel mills, their own lumber camps and saw mills. They not only get their raw material of first quality, but what is of equal importance they get them when they want them.

It is co-operation which enables them to maintain experimental shops where every effort is made to perfect the principle and improve the design of the International Line.

It is the great demand for their machines which enables them to equip their factories with every possible facility for producing machines of the highest excellence—factories and workmen which could not by any possibility be maintained to supply a small demand.

It is this demand which enables them to maintain agencies almost everywhere where grain is grown—convenient to you—convenient to buy—convenient to secure repair parts.

The fact that so many farmers cannot be persuaded to buy any other,—the fact that so many farmers continue to buy them,—the fact that they are considered the standard wherever grain is grown in every part of the world is sufficient indication of their reliability.

We don't believe that you will be willing to let harvest time approach without knowing more about the International line for 1906; we know you will be glad to get a catalog. Call on the dealer at your very first opportunity.

Go to the dealer now, and get whichever catalogue you want.

If you don't know an International Dealer—write to us for the name and address of the one nearest you.

INTERNATIONAL HARVESTER CO., OF AMERICA
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International Line—Binders, Reapers, Headers, Header Binders, Corn Binders, Corn Shocks, Corn Pickers, Huskers and Shredders, Corn Shellers, Mowers, Hay Tedders, Hay Rakes, Sweep Rakes, Hay Loaders, Hay Stackers, Hay Bales, Knife Grinders, Gasoline Engines, Pumping Jacks, Manure Spreaders, Weber, Columbus and Bettendorf Wagons, and Binder Twine.

Testing Vitality of Seed Corn

The following is from a bulletin just issued by the Agricultural Experiment Station at Purdue University.

No farmer can afford to neglect making sure that every ear of corn he uses for seed will produce strong vigorous plants. The difference between none and two or three weak ears per bushel of seed corn may amount to hundreds of bushels in the resulting crop. The cost of producing an acre of corn is practically the same whether the stand of plants is good or poor, so why not have the good stand and the larger crop?

To make the germination test, proceed as follows:

1. Make a shallow tray or box about two feet by three feet in size and two inches deep inside. Bore small holes, one and three-quarters inches apart, in the sides and ends about half an inch from the top. Through these holes string light copper or galvanized wire both ways thus marking the tray off into squares—a square for the kernels of each ear of corn to be tested. A stout string may be used instead of the wire but it will last only one season. Instead of weaving in the cross wires, a piece of large meshed, wire chicken-fencing may be nailed on top of the tray, with a half inch strip all around the edges on top of the wire so that when the trap is covered the cover will not rest on the wire. This is the "tester."

2. Fill the tester up to the wires with earth or sand and thoroughly wet it.

3. Take the tester to where your seed corn is, stored, or take both tester and the selected seed corn to a place where you can work conveniently.

4. Take the first ear of corn and remove the kernels, each from a different part of the ear, and put them on the

first square in the upper left hand corner of the tester and press them down into the earth. Lay the ear on a shelf or table. Then take the next ear and proceed in the same way, putting the kernels in the square to the right of the first and the ear in the corresponding position beside the first ear on the shelf. Continue this until the first row of squares is filled, then turn and come back on the next row below. The ear corresponding to the second row of squares may be laid in a row on top of the first row on the shelf. Whatever the system followed, the ears must be so arranged that the can belonging to the kernels in a certain square in the tester may be easily located.

5. After the kernels are all placed and well pressed into the wet soil, carry the tester into a room, where the temperature can be kept around 70 degrees. The ordinary living room will be about right, but the tester should be put near the stove.

6. Cover the tester with pans of glass, resting lightly on the sides so as to let in a little air. Glass makes the best cover because it prevents drying out and at the same time permits one to see how the corn is getting along without lifting the cover.

7. After four or five days take off the cover, carry the tester to where the corn is stored and then examine the kernels in each square. If any lot of kernels shows dead germs, or weak sprouts, throw away the ear from which they came. Never use an ear which does not show at least four strong root and stem sprouts out of five kernels tested.

The tester may be made of any size convenient. The one described above will test about three bushels of ear corn at a time, or every five days.

A. T. Wiancko, Agriculturist.

Draft-horse Type

There is approximately a standard of excellence in every class of live stock, and the ambition of the progressive breeder is to produce animals that conform to the specifications of the standard. There is an animal of faultless proportions in every attribute of its personality yet to be developed. The variations in excellence of the best standard types of draft horses represent, when combined in one harmonious individual, the animal sought to be evolved.

The more fashionable draft type is blocky conformation, with great weight as compared to height. A sixteen hand commercial drafter will weigh around 1,600 to 2,000 pounds, if of proper substance and proportions. The harness horse of the same height represents a weight of 1,100 to 1,300 pounds. The ranginess of conformation and more effeminate substance of harness horses as compared with draft animals creates the difference in weight.

Conformation of the drafter for best commercial type inclines to the upright shoulder, which gives the animal ability to throw its weight easily into the collar in moving heavy loads, while the harness horse is characterized by oblique shoulders to facilitate lofty style and commanding knee action.

Some actors are disproportioned in the width of the breast, setting the

forward legs too far apart and giving the animal a padding or swinging action when in motion. The action of all horses should be in straight line to be frictionless, elastic and attractive. The pose and action of drafters as well of harness horses largely establishes their commercial value.

Drafters are not in the speed class, and are therefore bred along lines of great substance in compact conformation. Broad knees, wide hocks, heavy, fat bone and a foot of medium depth are attributes of the commercial draft animal. The barrel is large and of ample length. The neck is set at a proper angle and adorned with a medium-sized bony head. The face of the horse should be wide between the eyes and a roman or dished profile is objectionable.

All breeds of drafters are gradually approximating a uniform type of massive bone, compact substance and

blocky conformation. The extreme weight animals are being produced in increased numbers, as commercial economy of care taking, drivers, vehicles and appointments require but little additional expense in operating a ton drafter than a 1,500 pound animal, while the former will perform nearly double the work of the latter in the transportation of merchandise.

Prices for good drafters make the industry of them for commercial use of the most profitable branches of animal husbandry. Good drafters sell readily at \$175 to \$225 choice at \$400 to \$550—the top price at the Chicago market. The draft pairs command \$350 to \$1,300, according to weight and quality. There is no danger of overproduction, as growth of population and increased industrial development create broader demand than the supply.—Drovers Journal.



Double Power Mill Co., Appleton, Wis.



COILED SPRING FENCE CO., 90 Winchester, Indiana.



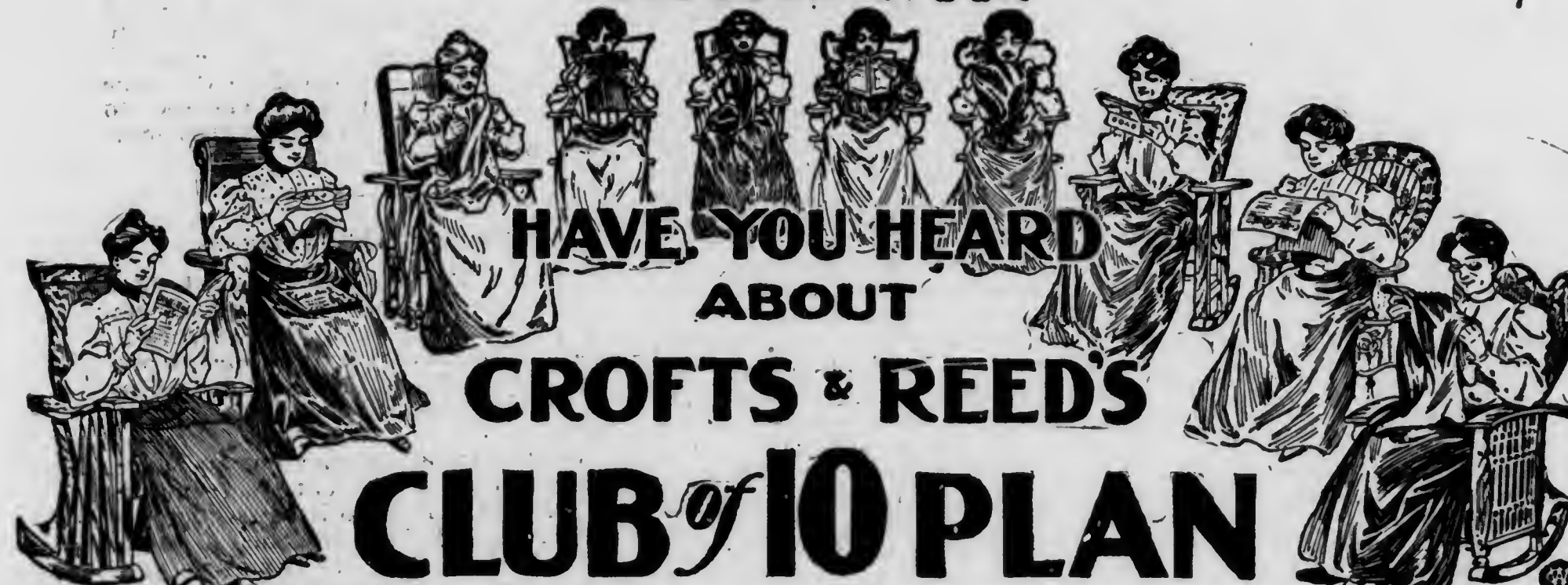
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Ever built was erected 17 years ago and is still in use as durable and strong as when first put up. The Hartman is a perfectly woven wire fence that is strong enough to keep in the maddest bull and fine enough to keep out the chickens. It is made of the best quality galvanized steel wire and is constructed. That's why it lasts so long. If your dealer doesn't handle it, write for catalogue and prices. Address GLEN MFG. CO., 136 Mill St., Ellwood City, Pa. Also Mfrs. Hartman Steel Picket Fence, Hartman Flexible Wire Mats and Glen Steel Mat.



16" 35 CTS. PER ROD DELIVERED.



For Farmers' Wives

Here is an easy way for farmers' wives to get beautiful, useful, up-to-date home furnishings such as shown herewith—without any cost. We call it our "Club of Ten Plan" which means that by getting nine of your neighbors to join you in forming a "club of ten" to buy the household necessities you use and need every day, such as teas, coffees, soaps, baking powders, flavoring extracts, spices, in fact nearly all your groceries, direct from us—the manufacturers—each member can get these

BEAUTIFUL PREMIUMS WITHOUT COST

Our prices for such groceries are no more, than you are now paying your storekeeper, and in many instances less, while the quality we guarantee equal to any goods sold for same money. In fact, we offer to send them (also the premium) and let you use what you wish for 30 days. If they are not satisfactory you can return them at our expense and your money will be refunded in full. Send for particulars on our Club offer. Thousands are buying from us in this way and furnishing their homes without cost.

If you do not want the premiums ask us about our "factory to family" plan by which you can buy these same high-grade household supplies at half price. It is a plan that

Saves You \$10.00

every few weeks. For example, we sell a Pure Cream Tartar Baking Powder which costs you 25c at dealers for 12c and guarantee it equal to any sold at twice our price. Soap which you pay 5c a cake for we sell at 2c, and so all through our list of about 140 different articles. You can save one-half on nearly everything you buy.

Send For These 2 Books

they explain all our money-saving plans; show pictures of both goods and premiums and prove the folly of paying double our prices for things you must buy nearly every day. One of these books tells "How the Farmer's Wife can Save \$10.00" in a few weeks—the other "How she can Furnish Her Home without Cost." They are free for the asking. Send for them today and begin to save by our direct buying way. It pays.

CROFTS & REED, 815 W. KINZIE STREET, CHICAGO, ILLINOIS



Ex-Secretary W. T. McIntire of the Lee Live Stock Commission Co., Kansas City, Mo., called on us last week and reported unusual activity in Angola circles. Mr. McIntire has himself handled over 5,000 goats within the past twelve months and is authority for the statement that many new flocks have been started within that time. He says he is enjoying a good deal of healthy laughter over the insistence of the croakers that the

Angora has seen his best days in this country.

There is no end of newspaper speculation just now over the fancied losses of feeders who stocked up in the fall and early winter with \$6.00 and \$6.60 feeding sheep and lambs, but beyond the professional western feeders who get panicky over the high prices of alfalfa and grain and surfeited the mark-

et with half-fed stuff, the losses among feeders will be inconsiderable—none here near equal to the profits on farm fed flocks east of the foot-hills.

Advertisers wishing to reach stock breeders should use **Blooded Stock.**

Some Things in Cross-Breeding

(continued from page 4)

We can see, however, that this man would make a successful breeder should he attempt it, for he evidently has a large amount of what we might call "cow sense" or understanding.

At the outset, I spoke of temperament in cattle. A number of years ago, in reasoning on certain things that I found in my studies in cattle breeding, I was obliged to give a name to this element of inherited tendency, which I called "Temperament."

The breeder, if he thoroughly comprehends the scope of his purpose and work, is all the time striving to enlarge by skillful mating this element of temperament in every succeeding generation. If a dairy animal is bred, we want it more and more developed in this direction through every successive mating. If a trotting horse or a draught horse is bred, the same principle of constant enlargement of temperament should apply. Without this definite purpose of constant enlargement of the basic temperament, there can be no definite progress made in breeding.

Therefore, we are wise if we study the power and limitations of temperament. From it we will learn, never to unite or mate two animals of opposing temperament or tendency. We must study as much as possible, to enlarge the stream of temperament, not divide or dissipate it.

We must breed dairy temperaments of an agreeing propensity together as much as possible. For instance, the Holstein has a powerful propensity towards a large quantity of milk with a small fat globule of butterfat. These traits are as strongly inherited as are its colors.

The Jersey and Guernsey families have just as strong an inherited tendency or propensity towards a smaller quantity of milk flow with a much larger fat globule and a larger per cent of butterfat.

Is it a good exercise of breeding skill to attempt to unite in one animal such strong and widely dissimilar tendencies? Do they usually nick well, and to the purpose of making a better cow therefore? I think not.

With the Ayrshire cow and particularly the Ayrshire grade, the female comes so far this way from the rigid prepotent line, as to very successfully nick with the Jersey or Guernsey. At least, such has been the verdict of actual facts and experience in such breeding. If I were to arrange these forces that we are dealing with so constantly, and I may say many times so blindly, I would state them as follows: 1. Temperament. 2. Function. 3. Form.

We should breed primarily for temperament. Keep it as clear, unclouded and strong judgment of the prepotent power of the sire when we select him; on our wisdom in this particular, depends almost everything that follows. Temperament when acting free and unhampered by other opposing tendencies establishes function. Then function establishes form.

So in seeking to know temperament, whether it is of the kind we want, we reason back from form to function and finally to the bed rock cause of all, which is temperament.

Mention BLOODED STOCK when writing advertisers

BLOODED STOCK

Breeding Ages.

A writer in the "London Live Stock Journal" has been investigating the ages of some of the parents of some of the most notable Hackneys, and finds that the facts of the case do not all bear out the theories held by horsemen on the subject. For instance, it is believed to be a mistake to breed from two-year-old fillies, as the dams, not having come to their full growth, cannot throw a good foal, but he finds a list of six notable horses whose mothers were bred from at two years old. Again it is believed that "it is no good breeding from old mares," or, if you do, you must use a young sire, but he finds a list of seven good horses bred from old parents—including Danegelt, whose sire was 18 and dam 22 years of age. He finds some notables produced from aged mares and young sires, and also proportionately as many from young sires and young mares, so that the evidence leans neither to one side nor to the other, but all goes to prove that age has nothing to do with excellence at all. The writer quoted has found, from a study of the Stud Book, that the most celebrated Hackney stallions have been bred anyhow in the matter of age of parents, and there does not appear to be any superiority of one age over another in either sire or dam. The conclusion of the whole matter is, in selecting a sire for his mare, a breeder should not take age into account at all, but should confine his attention solely to his conformation and pedigree, selecting a sire strong in these points in which his mare is deficient, and rich in that blood which will

best combine with hers.—The Dairy, London

The above is a side line leading to a correction of a notion quite generally believed in by dairy farmers, to the effect that the first calf of a heifer, male or female, will prove inferior in breeding power as compared with later calves. So far as we have been able to discover, there is no truth whatever in the notion.

More Milk Money.

Did you ever try feeding stock food to increase your milk yield and to improve the condition of your stock? N. Hass, of Scotts, Mich., has, and he tells about it in a Stock Book published by the Ashland Stock Food Co., Ashland, Ohio.

It will pay you to read what he says, because it will mean that you can improve your milk yield if you will follow his advice. Besides, the book is full of hints that will help you to care for your stock and save money on your feed bill. It is also a valuable book to have in emergencies—it tells you just what to do in cases of sickness and accident. Write today for the book, the publishers will send it free to farmers and stockraisers.



Jersey Heifer Calves,

Four to six weeks old, Hood Farm Blood. Will sell these calves reasonable. They are from business cows.

ERI H. POWLEY, R. 2, Oxford, Pa.

What You Gain

In a few words, you gain this by using a Tubular: (1). One-quarter to one-half more force, which is thousands of times stronger than the force of gravity that makes cream rise in pans. (2). One-half to twice as much for butter, because Tubulars remove dirt and bacteria, thus making gilt-edge butter possible. (3). Half the work saved, because you finish skimming five minutes after milking, feed warm skimmed milk at barn, and have only the can of cream to care for. Write today for catalog W-300. It tells all plainly.

THE SHARPLES SEPARATOR CO.

TORONTO, CAN. WEST CHESTER, PA. CHICAGO, ILL.

Sharple's
TUBULAR
CREAM SEPARATORS



SAVE ALL YOUR CREAM

A hired man who doesn't milk your cows dry every milking is pretty poor dairy help at any price. Isn't that so? And in the same way a cream separator that leaves part of the cream in the milk every skimming is expensive, no matter what you pay for it. The improved

U. S. CREAM SEPARATOR

Holder of World's Record for clean skimming

takes out more cream than any other separator. This is due to the exclusive construction of its skimming device. We want to show you about this, and prove that what we say is true. The best way to do it is to have you see one of our big, hand-mailed. Better do it now while you think of it.

VERMONT FARM MACHINE CO., BELLOWS FALLS, VERMONT

Eighteen centrally located distributing warehouses throughout the U. S. and Canada

490

BLOODED STOCK

An Extensive Out-Break Of Tuberculosis.

An illustration of the results of lack of care regarding testing for tuberculosis of cattle was recently shown in the destruction by the New Jersey State Tuberculosis Commission of 24 out of 52 milk cows in a grade herd in the Southern portion of the State.

This had been assembled only a few years, yet lack of the necessary application of the tuberculin test made this great sacrifice necessary.

An interesting feature of the case was found in the fact that every animal killed on the test showed marked evidence of the disease when the carcass was examined. Had the test been made a year ago the disease would have been detected and furthermore it is fair to say the percentage at that time would have been less than one-half or one-third of its present condition.

It is foolish to delay any longer looking into this important matter because the simplicity of the test makes it possible as well as your neighbor as well as yourself to find out whether your herd is or is not affected.

Any breeder, dairyman, or farmer, can easily test his cattle. Many think it is necessary to employ a Veterinarian, but that is a mistake. Geo. P. Pilling & Son, 2224 Arch street Philadelphia, Pa., furnish an outfit that is easy to use. Write at once and mention Blooded Stock.

Hogs Are Money Makers.

The farther hogs get away from the hog pen, and the more they live in the hog pasture, the greater is their money producing power. It is useless to say, "but I cannot have a hog pasture," for we have been all the way from Kansas City to Indian Head, and saw a good hog pastures strewn the whole distance. Alfalfa in Kansas; alfalfa, rape and clover in Nebraska; clover, alfalfa and barley in southern South Dakota; rape, rye, barley and brome grass in North Dakota and northern South Dakota, and brome grass and barley in Canada.

All these pastures we found doing excellent service, and greedily eaten by the hogs in them. In the more northern sections we found considerable blue grass in the permanent hog pastures, and some of the far North Dakota and Canada growers had peas growing for both pasture and later feed.

But everywhere the pasture was paying.—Dakota Farmer.

There is no telling what may happen in the mutton and wool markets of the immediate future, but it is safe to say prices are more liable to ascend than descend, particularly as regards the latter commodity.

WORLD'S BEST BUTTER

DE LAVAL SEPARATOR TRIUMPH AT NATIONAL DAIRY SHOW

The great DAIRY SHOW and NATIONAL BUTTER-MAKERS CONVENTION held at CHICAGO, February 15th to 24th, awarded ALL HIGHEST BUTTER PRIZES to entries made from DE LAVAL SEPARATOR CREAM, the prizes and the scores being as follows:

GRAND PRIZE—GOLD MEDAL

A. CARLSON, RUSH CITY, MINN. Score 97

SILVER MEDAL

J. E. HOWE, OAKLAND, MINN. Score 96½

SILVER CUPS

E. J. SIMONSON, MILTON, WIS. Score 96

W. H. BECHTEL, CARO, MICH. Score 96

LOUIS NIELSON, CAMP POINT, ILL. Score 96

F. L. ODELL, GREENFIELD, IOWA Score 95½

Out of the total 610 butter entries 559 were DE LAVAL users, the other 51 representing the users of all other separators combined, while of the 496 entries scoring 90 and over, 463 were DE LAVAL made, the other 33 covering all competitive users together.

All this is in keeping with what has happened at every previous Convention Contest of the National Buttermakers Association since its organization in 1892, all highest awards having been made, without exception, to DE LAVAL users.

While in evidence of the recognition of DE LAVAL's superiority by the best buttermakers everywhere, it is important to note that the proportion of DE LAVAL made entries has never been less than 85 per cent., and at the present Great Show was over 91 per cent. of the total number.

A DE LAVAL catalog, gladly sent for the asking, will help to make plain WHY under like conditions DE LAVAL cream produces butter superior to that which can be made in any other way. Write for it today.

The De Laval Separator Co.

Randolph and Canal Sts.

CHICAGO

1213 Filbert Street

PHILADELPHIA

9 & 11 Drumm St.

SAN FRANCISCO

General Offices

74 Cortlandt Street

NEW YORK

109-113 Youville Square

MONTREAL

75 & 77 York Street

TORONTO

14 & 16 Princess Street

WINNEPEG

Pilling CATTLE Instruments

Pilling instruments are just the thing for dairymen and farmers. By their use you can cure your own cows and save the expense of a veterinarian—no special skill required.

Pilling Milk Fever Outfit for air treatment, a method that cures 97 per cent of cases treated, recommended by the United States Agricultural Department, with full directions, \$3.00. Cattle Trocar for blood, 1.50. Trot Distoury, \$1.50. Improved Trot Opener, 75c. Patent Coin Silver Milk Tubes, 50c.

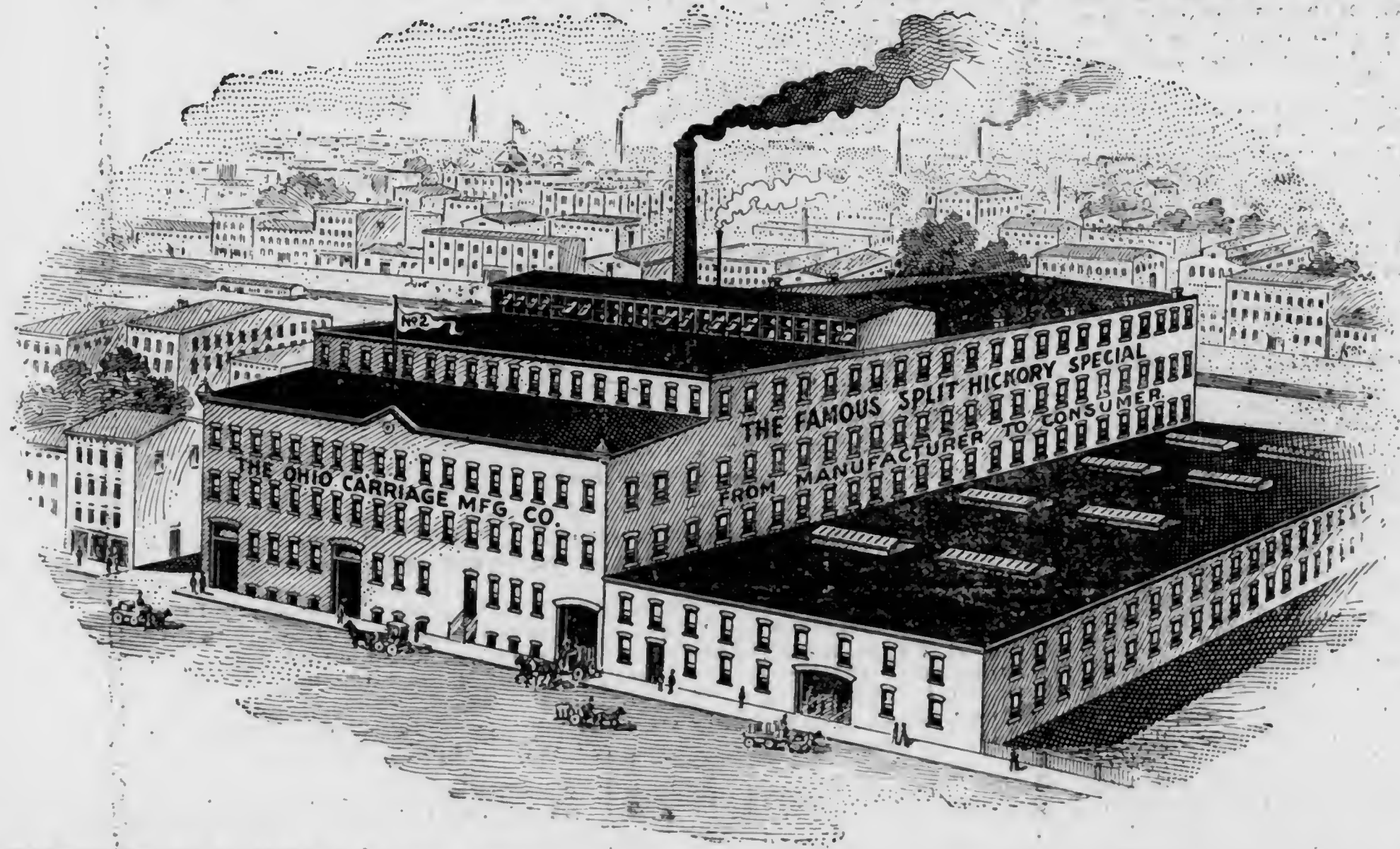
G. P. PILLING & SON,
2224 Arch St., Philadelphia, Pa.

Catching Pinckpockets

The Sharpless Separator Co., of West Chester, Pa., have a man in almost every town who makes it his business to catch pickpockets. Strangely enough, these pickpockets are always caught robbing themselves—and are always farmers or dairymen. The Sharpless Separator Company's men do not send these convicted self pickpockets to jail, but show them how to make more money. They prove to them that, if they have not a famous Sharpless Tubular Cream Separator, they are picking out of their own pockets one-third to one-half the profits they should make from their milk—that they are, in fact, losing one-third to one-half their cream. These men can convict you of robbing yourself. They will do it, either by

lending you a Tubular for a free trial, or by skimming for you, free, a batch of milk you have already skimmed with pans or cans, and taking out of that milk, which you think is skimmed clean, the cream you have left in it. This proof won't cost you one cent, but will help you increase your butter money from one and one third to double what you now make. All you need do, to find out how much cream your pans or cans lose, is to borrow a Tubular from the agent for a free trial, or take a batch of skimmed milk to the nearest Tubular agent. The result will surprise you, cost you nothing, and put money your pocket. We suggest that you write The Sharpless Separator Co., of West Chester, Pa., about this, at the same time asking them for catalog No. 300.

A Special Factory for Special Buggies



Did you ever see an IDEA grow into an immense FACTORY?

Well, here's a picture of the factory—and the story of how it grew from one man's idea.

This new factory was built and equipped by The Ohio Carriage Mfg. Co., of Cincinnati, and it is devoted exclusively to the manufacture of their famous Split Hickory Special Top Buggy.

It is the only carriage factory in the world making one distinctive and exclusive style of buggy.

Some others claim to be manufacturers by showing pictures of a big factory, but forget to state just where their factory is located, principally because it doesn't exist. Our factories are located right here in Cincinnati at 1992 to 2000 Plum St., and 247 to 253 Stark St., and are open to inspection by you or your friends at all times. It's the only one in Cincinnati and one of only two in the state of Ohio selling their product direct to the consumer.

This is a new plan—this building of one special factory for one special

buggy.

The Company started out to make the Split Hickory Special their leader, the best buggy in the world and they have succeeded in placing it far the lead of all others buggies.

The factory has 75,000 square feet of floor space. Think of it—seventy-five thousand square feet of factory space given over exclusively to the making of one kind of vehicle.

Before this new factory was built, the Company devoted a part of their general factory to the manufacture of the Split Hickory Special, and were able to make a better buggy than anyone else at the price.

But now, with an enormous special factory, having acres of floor space, and more skilled carriage builders than ever before, they are bound to surpass their former record.

On the new plan, The Ohio Carriage Mfg. Co., manufacture at a minimum of cost, using the finest grade of material it is possible to get, and the highest skilled workmanship. Every man is an

SIGHT RESTORED

FREE 80 PAGE BOOK

TELLS HOW TO CURE YOURSELF of Blindness, Falling Sight, Cataracts, Gravelled Lids, Weak, Congested or Sore Eyes, Scars, Scums and all other Eye Diseases at your own home as thousands of others have done. Book tells all about eye diseases, has colored pictures showing diseased eyes. Tells all symptoms of eye diseases. Contains eye testing chart. Tells how to test eyes. Tells how to care for eyes and many other interesting facts. Sent free to all—write today. Address DR. W. O. COFFEE, 174 Century Bldg., Des Moines, Iowa



The "STAY THERE"

Aluminum Ear Markers are the best. Being made of aluminum they are brighter, lighter, stronger and more durable than any other. Fit any part of the ear. Nothing to catch on feed trough or other obstacle. Your name, address and any series of numbers on each tag. Some also tag, catalogue and prices mailed free. Ask for them. Address WILCOX & HARVEY MFG. CO., 108 Lake St., Chicago, Ill.

Plows With Tongues.

Higganum, Conn., March 20, 1906.
Mr. Editor,
Dear Sir:

For many years I have been connected with the construction of Disk harrows and plows. Occasionally I have been asked why not make a Disk machine same as a drag plow with a beam or tongue. I have given this subject careful thought from the start, over thirty-five years, and covering over more than two thousand different disk harrows and plows that I have gotten up. Thus far have not seen any practical way to construct a disk plow or harrow without the use of a pole especially a disk harrow.

Harrows vary in length from 2 to 16 feet wide and in size of disks from 11 to 20 inches or more, and in horse power from one to sixteen. They are made with single and double levers, single or double action. They are made with hitches for horses to go abreast, sometimes two or four and up to ten and twelve. Again, the team is used in a string, two abreast, often using as many as eight to ten pair of horses to a harrow. No matter what kind of a hitch used, it is necessary to so hitch the team to the harrow that they could not get there heels back against the disk. The only way that I have found to keep the horses heels away from the disks is to have a pole long enough so that they cannot get back against the disks. It is the same in all disks harrows.

When harrows are drawn out of work the disks are always set in a straight line. Again, the short tongue or beam has to be carried on a carrying wheel. With this condition of facts how can it be drawn down hill?

With extension head for orchard work they must extend far out under the limbs of the trees. With a short tongue the harrow will zig-zag across the field striking the trees and horses heels in turn. I don't guess at it. Years ago I killed two good horses trying the short tongue foolish experiment. I have done with this fooling and hereafter I shall never recommend any disk machine that has not a pole long enough to keep the horses heels out of the disks.

If you will kindly print this word of caution and send it to your farmer friends, also tell them if they want to know how to raise six tons of Alfalfa, Timothy and Red Top hay to the acre and make money on their farms, if they will send me a 2 cent stamp to Higganum, Conn. I will tell them how.

Yours very truly,
George M. Clark.

Some time ago the author participated in a musical performance given by two players separated by many miles, with the audience located at yet a third distant point. The author, provided with a head receiver connected to the telephone circuit and standing before a large horn attached to the transmitter, played on a French horn for the benefit of listeners in the office of the Spokesman-Review, at Spokane, Wash., 726 miles from Salt Lake City, in which place he was located.

The remarkable feature of the performance was that the piano accompaniment was played by a music dealer named Reeves at his store in Helena, Mont., 625 miles away. A transmitter, equipped with a megaphone was

mounted on top of the piano and this player also wore a head receiver.

In playing the Miserere, from Ill Trovatore, for instance, your correspondent waiting in Salt Lake City, could hear Mr. Reeves play the introduction, and then being well acquainted with the score, knew just when to begin with melody. Then at the close of the strain, he would listen until the intermezzo had been played on the piano up at Helena, and then being again. Their was not the slightest jar between horn and piano during the entire program, and people listened along the line thought both instruments were being played in the same room. Your correspondent serenaded the adjutant's office at Fort D. A. Russell and the offices of the Cheyenne newspaper 500 miles distant, and one night was got up out of bed at 11 o'clock to serenade numerous central offices of the company scattered through the southern part of Utah. General Manager Murry was much interested in these experiments, and afforded every facility for their conduct. When satisfactory connections are made with the Pacific Coast, an effort will be made to serenade the newspaper offices of several coast cities from Salt Lake. It is believed that the experiment could be carried on with success with Omaha and even points east of that city.

An attempt was made by the telephone engineers to locate transmitters in front of the great organ in the Salt Lake Tabernacle, and reproduce organ recitals at points along the system, but the Mormon Church authorities were not favorable to this, and the experiments were cut short before they had been perfected.

(American Telephone Journal.)

The March issue of the Fruit-Grower, published at St. Joseph, Mo., is an exceedingly handsome number. It consists of 64 pages, with handsome cover design, in two colors, and is the regular Gardening Annual of this publication. Prize gardening articles are submitted from various parts of the country, which cover the subject of the management of the home garden in a very effective manner. These articles are well illustrated. Another feature is an illustrated article on the subject of spraying fruit trees, with suggestions for making and applying the spray mixtures needed in the spring. The illustrations show a number spraying outfits, with mixing tanks, elevated

platforms, etc. The paper is a credit to its publishers, and is full of live, fresh matter of value to everyone interested in growing fruit or who desire to make the home garden more of

DEAFNESS CURED

FREE 64 PAGE BOOK
TELLS HOW TO CURE YOURSELF of partial or complete Deafness, Headaches, Ringing in Ears, Discharging Ears, Ulcers in the Ears and all other Ear Diseases, as well as Catarrh, Hay Fever, Asthma, at your own home. Book tells all about Deafness and other ear diseases; how to cure them. Tells how various constitutional diseases affect hearing. Gives all symptoms of approaching Deafness. Tells all about Headaches. Tells about artificial ear drums and how to prevent Deafness. Tells all about Catarrh. Book is free—write today. Address DR. W. O. COFFEE, 174 Century Bldg., Des Moines, Iowa

1900 Washer FREE!

Any worthy person can have a "1900" Gravity Washer free to try for four weeks just by writing for it. We pay the freight and take all risk. You don't risk a penny. Test it four weeks at our expense. If you like the Washer, keep it on the "1900" plan, which we will explain to you. If you don't like it return it at our expense, so you are nothing out. Washes a tub full of dirty clothes clean in Six Minutes. Get it FREE by addressing a postal today to "1900" WASHER CO., No. 5471 HENRY STREET, BINGHAMTON, N. Y., or 355 Yonge Street, Toronto, Can.

EASTER LILY FOR

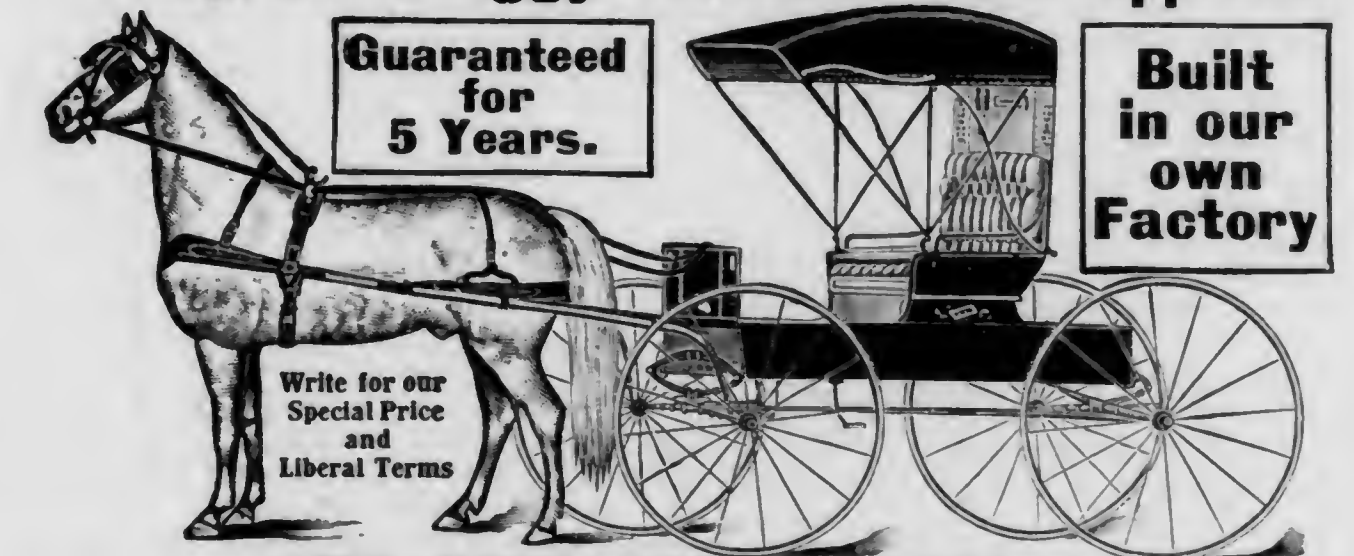
EASTER SUNDAY

Send 10 Cents

Will send you 1 Easter Lily Bulb, 1 Tuberosa, 1 Gladiolus, 1 Cinnamon vine, 1 Oxalis also 10 different kinds of fresh, finest grown seeds, including Pansies, Petunias, Phlox, Asters, Stocks, Sweet Peas, Cosmos, Balsams, Nasturtiums, Morning Glories, Verbenas, Portulaca. This fine collection of seeds and Bulbs for 10c. in Silver or 2c. Stamps.

American Seed Co.
Malden, Mass.

We Ship This High Grade Buggy and Harness on Approval



OUR "CHICAGO SPECIAL."

We manufacture a complete line of Vehicles and Harness and sell them on the most liberal terms ever offered. CUT THIS AD OUT and send for our handsome catalogue, mailed FREE upon request.

MARVIN SMITH CO. WHOLESALE MANUFACTURERS, CHICAGO, ILLINOIS.

Banking by Mail

Under our banking system, business men everywhere find it to their advantage to make remittances by checks, rather than by drafts, post office or express money orders. There are several good reasons for this, but the two principal ones are these:

First—The convenience in paying a bill by simply writing out a check, thus making it a great time-saver as well.

Second—It gives the most satisfactory form of receipt for the payment made.

The farmer has become a business man. In the progress he has made within the past ten years he has found it necessary, and greatly to his profit and convenience to handle his own financial affairs, rather than to trust them to the local banker, lawyer or merchant. Our agricultural colleges, farm institutes, and great conventions, that relate to agriculture in various



George W. York.

Yards and receive checks in return. It can be arranged to have these checks sent to this bank for deposit to the account of the farmer without exchange charges.

Chicago is likewise the great produce center, and commission houses here are remitting millions of dollars annually to the farmers direct. By the plan proposed, the farmer can have this placed to his deposit and receive the credit no ice from the bank.

Chicago is also the great grain market and the same rule applies in that case.

This mail order banking proposition is best explained through the literature the Ravenswood Exchange Bank, of Chicago, Ill., will send to anyone asking for it.

Ravenswood Exchange Bank is composed of men who have had agricultural experience and are familiar with the requirements of the farmer along banking lines. The president, Mr. Louis P. Scoville, under whose direct supervision the mail order business is conducted is a director in White's Class Advertising Co., an advertising agency that handles extensively agricultural advertising accounts, and is thus placed in close touch with the great consuming interests of the country.

Mr. George W. York, a director of the bank, is also treasurer of White's Class Advertising Co., and has had more than twenty years' experience in business lines directly affecting important branches of agriculture. He is publisher, likewise, of the American Bee Journal, the oldest bee paper in America, with which he has been connected for twenty-two years.

Mr. Frank B. White, president of White's Class Advertising Co., who is well known by the agricultural fraternity because of his long service in connection with the advertising business, always a specialist in agricultural lines, has this to say about this plan intended for farmers to conduct their banking by mail.

"I most heartily approve of the plan proposed by the Ravenswood Exchange Bank to conduct a banking business by mail, particularly in behalf of the farmer. Both Mr. Louis P. Scoville and Mr. George W. York are interested in my company, and I know them to be thoroughly competent, honorable, safe and conservative.

I am also acquainted with the vice-president, Dr. W. C. Abbott, whom I know to be a successful publisher and manufacturer, and who has recently become interested in this splendid institution. I am sure that the plan they propose is going to be of great advantage to the farmers everywhere, because of the convenience and saving, and furthermore because of the interest to be paid on deposits, all of which they explain in their literature."

When writing to advertisers mention BLOODED STOCK.

STAR INCUBATORS & BROODERS

Guaranteed to suit or no sale. Big hatches and broods prove their money-making merit. Write for new FREE catalog. STAR INCUBATOR CO., 625 Church St., Bound Brook, N. J.

IT'S A CORKER

The Keystone Incubator—cork lined, double walls, adjustable egg trays, safety lamp, heat and ventilation under perfect control. Easy to operate. Big, healthy hatches. It's a corker every way. Catalog free. The Diehl-Schilling Co., Box 654, Easton, Pa.

SEE THE 1906 RELIABLE

before you buy. Perfectly practical for poultrymen or beginners. Double heating system gives bigger hatches—saves one-third the oil. Sold on a money back guarantee. Write for free catalog. Reliable Farm Pure-Bred Birds and Eggs. Get prices. Reliable Incubator and Brooder Co., Box B-410 Quincy, Illinois, U. S. A.

BANTA Incubators & Brooders

Backed by 14 Years of Successful Use by poultrymen all over the world. No guesswork. They are automatic in regulation and ventilation. Fully guaranteed to give YOU satisfaction. Send for free book. BANTA BROTHERS, MFG. CO., Dept. 52, Ligonier, Ind.

METAL MOTHERS

Complete fireproof Hatching and Brooding plant for \$7.50. 2 qts. oil will hatch and brood the chicks. Our nest system is the latest discovery. Full line poultry supplies. Lowest prices. FREE catalogue. Write to-day. **CYCLE HATCHER CO., KEESVILLE, N. Y.**

Hartmans Catalogue

Describes over 40 Leading Varieties of standard bred fowls. Quality the best. EGGS IN SEASON. STOCK FOR SALE. Send 4c for Catalogue. Your money back if we can not please you. **GEO. F. HARTMAN & SONS, Box 93, Freeport, Illinois.**

INVESTIGATE THE POULTRY BUSINESS

Write for a free copy of my book describing **Profitable Combinations of Egg, Broiler and Roaster Farms**

It gives the prices paid for eggs and poultry week by week for the past three years. It tells how and when a hatch taken off each week in the year could be most profitably marketed. It shows how you can make \$2.00 on a large winter roaster. It tells what profits can be made with each of the popular breeds, and the costs of production. I have helped thousands to make money with poultry. My Model Incubators and Brooders are used on the money-making farms. It is my business to teach those who use them to do so profitably. Whether your needs are small or large, I will furnish without charge, estimates and plans for a complete equipment that will insure success without your spending a dollar uselessly. Send for my complete literature.

CHAS. A. OYPHERS
4515 Henry St. Buffalo, N. Y.

The Pilling Cattle Instrument Cases. Something Entirely New.

These cases, which are made of polished oak, contain a number of instruments that no farmer, dairyman or stock owner can afford to be without. Every one of these instruments when needed at the moment. Just one case of milk fever saved will many times pay the cost of the entire outfit. It seems strange that this very important outfit has not before now been made up. To us it seems one of the most important improvements to the dairy farm ever devised.

Not only does it contain the milk fever outfit for air treatment recommended by the United States Department of Agriculture, but it also has a complete assortment of cattle syringes, trocars for blood, lead probes, milking tubes, teat dilators, teat bistouries, teat opener, thermometer and bandages. It is made by George P. Pilling & Son, 2224 Arch St. Philadelphia, Pa. who will gladly send any of our readers description of the cases.



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Points On Hog Growing.

"Through a long series of experiments conducted at Ottawa and Guelph and all over America, we have found that with the average price of grains the cost of producing a pound of pork from the time a pig is two months old, or weighs about thirty pounds, until he is six or seven months old and weighs from 100 to 200 pounds is from 4 to 4 1/2 cents a pound," write Prof. Grisdale of the Ontario agricultural college. "Our experiments go to show that by judicious use of skim milk in connection with the meals or grains, we are able to produce a pound of pork for from 1 cent to 1 1/2 cents less than where meals alone are used.

"To get the best results it is quite unnecessary and disadvantageous to feed skim milk or whey in the largest quantity. The best results came from where we fed from two or three pounds of skim milk to one pound of meal. With such feed we find our skim milk will replace sufficient meal so that we are really selling it for from 40 to 45 cents a hundred pounds. If we feed our pigs from five to eight pounds a day we are selling it at the rate of 42 cents per hundred pounds. As we increase the proportion of skim milk to meal down comes the value of our whey or skim milk. Where we feed as high as ten pounds it comes to 30 cents, up to fifteen pounds we get only about 20 cents, and where we went as high as

twenty-five pounds our skim milk was worth only 20 to 15 cents per hundred pounds.

"Wherever we have fed skim milk we have got an improved article of pork. The pigs have hardly ever been too fat. The skim milk seems to induce growth of the best kind. In every case where we have fed skim milk the bacon has been select, and when we killed, it has been in every case hard and seldom too hard, either.

"I was shocked by a farmer in the east who told me he was feeding 25 to 30 pounds skim milk to every pig. There is tremendous loss. He is getting only 15 cents a hundred pounds for this skim milk, whereas he may as well be getting 30 or 40 cents, making that much more money and producing that much more bacon, and employing another man and making more profit, because even under conditions as they

exist at present you will admit that if you can produce bacon for 3 1/2 cents a pound there is money in it.

"You say it costs us a whole lot to get the young pigs. Our experience with the raising of pigs has been that we can keep a good sow in perfect condition a year round for \$15. Estimating the meal at 1 cent a pound, \$15 will keep that sow a year, including cost of pasture and allowing so much for cost of building and everything else, barring the labor, which is not included. From the average sow we many anticipate eight pigs if she gives only one litter, and that reduces the cost of the young pig below \$2. If she gives two litters, it cost somewhere around \$1 per pig. We may say \$1 a pig. If you add \$2 a pig to \$7, which we say is the cost of a 200-pound pig, you get \$9, and the lowest price we have got this year has been \$10. There is still \$1 clear profit."

GOOD NEWS FOR THE DEAF



Here's the gladdest, best news that ever came to deaf people—news so welcome and so joyful that it seems too good to be true! Yet it is true—absolutely true—and it means happiness and hearing for many, many victims of deafness!

The best cure yet known for Deafness—a cure that has been successful in even very bad cases of this trouble—has just been perfected by a famous specialist after twenty-one years of study and scientific investigation. Firmly believing as he always has that the greater part of the so-called incurable cases of Deafness could be cured, he worked unceasingly until he found the method for curing Deafness that is now producing such splendid results. Deafness Specialist Sproule, originator of this new and successful treatment, has always had the greatest sympathy and feeling for the Deaf. He understands all the loneliness of their lot, and he wants them to know about his treatment since by it he can bestow the blessing of hearing on so many who now believe their Deafness to be hopeless. He has already cured by its means numerous cases of Deafness where other doctors and other treatments have wholly failed, and he has restored clear and perfect hearing to persons who had not had distinctly for years. Knowing as he does all that he can do for sufferers from Deafness, he feels it his duty to assist them with the knowledge he has gained in just such cases as theirs, and in friendliness and sincerity he gladly offers

FREE To The Deaf

the benefits of his skill and learning. If you are deaf—if your hearing is failing in any degree—he will send you a careful diagnosis of your case and give you, without it costing you a cent

THIS COUPON entitles readers of this paper to medical advice free on curing deafness

Do your ears itch?
Do your ears throb?
Do your ears feel full?
Do both ears trouble you?
Does wax form in your ears?
How long have you been deaf?
Do you have pain in your ears?
Are you worse in damp weather?
Do you hear better in a noisy place?
Did your deafness come on gradually?
Do you have a discharge from either ear?
Do you have ringing sounds in your ears?
Is your deafness worse when you have a cold?
Can you hear some sounds better than others?
Are there hissing sounds like steam escaping?
Do your ears crack when you blow your nose?

NAME

ADDRESS

—TODAY!

VETERINARY DEPARTMENT.

C. D. SMEAD, V. S., Editor

Professional advice given free to all subscribers through this department of Blooded Stock. Always describe symptoms, age, etc., as accurately as possible. Whenever you want prompt personal advice by letter and not for publication enclose One Dollar (\$1.00) fee. To derive the greatest benefits from this department preserve regular files. Always send your full name, post office, county and state with each inquiry direct to Blooded Stock, Oxford, Pa.

HORSE COLLAR

How many farmers give more than a passing thought to their horse collars at the opening of the spring season? The main idea seems to be to "get started, and fix things up afterwards." It is very well to put the work through with a rush, but a little attention to the work collars will help wonderfully to gain this end.

It is seldom, if ever, that the neck and shoulders of any two horses are exactly the same in size and form, and the collar that fits a horse early in the spring when he is fat, hangs loosely about harvest time.

Many farmers make the mistake of interchanging horse collars, regardless of the fact that it is the best way to produce shoulder galls. Every horse should have his own collar, fitted up closely on the sides, top and bottom. Loosely fitting collars or carelessly adjusted hames work great mischief with horses' shoulders, says a writer in the Southern Planter.

Now it is about time for farmers to begin active spring work. It would be well for them to give their horse collars personal attention, instead of leaving this work entirely to the hired help. As collars are made over a last while in a thoroughly wet condition, why would it not be well to fit them to the horses' necks in the same way? This can be done by selecting a collar nearest the size required and allowing it to soak in water over night. In the morning it is put on and drawn up closely with the hame strap. With moderate working for a day or two the collars become "set," fitting the neck and shoulders perfectly. This should be done not only to the new collars, but every spring the old ones should be treated the same way, for the collars that fitted at the end of the fall season, when the horses were thin, will be too tight in the spring. Many farmers soak and fit their horse collars in this fashion two or three times throughout the season, keeping them fitted to the horses as they become worked down in flesh, with the result that their shoulders are always in good condition.

The proper adjustment of the hames, so as to distribute the draft, is of great importance, and in each case must be fixed according to the conformation of the horse. When properly arranged, there will be no weaving back and forth of the tops of the hames as the horse walks. This is an indication that the draft is too near the shoulder points, and with every motion the collar is kept twisting until the shoulders, or the top of the neck or both, are injured.

Badly adjusted collars are often the cause of balky horses. Without doubt they suffer unmerited ill-treatment, and much of their abuse is traceable directly to this trouble. The horse is man's best friend, and nothing short of a perfectly fitting collar, such as he justly deserves should satisfy his owner.

BLOODED STOCK

SKIM MILK PAINT

Of all the compounds that I have used, skim-milk is the cheapest and best. About twice a year I see the receipt for government whitewash; I have found it expensive, not much better than ordinary whitewash, very dazzling to the eye when new, and easily washed off. Oil and lead are too expensive for old and unplanned buildings as it is a good deal like pouring water into a rat-hole to try to fill the cracks with expensive paint. Paints last but a few years at the most for some reason unknown to us, unless it is that they are made to sell only, and the quicker they fade or peel off, the more can be sold.

The following mixture is so cheap and so quickly put on that one can afford to paint as often as needed; but from my experience, if properly made and put on, it is more durable than the others. It is made of skim-milk, (either sweet or sour) water lime, or a

CAR-SUL

The Disinfectant Dip That is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurf, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

Send For Free Book on care of hogs and other livestock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

Tryal gallon \$1.50, express paid; 5 gallon can \$6.00, freight paid.

Moor Chemical & Mfg. Co.
Manufacturers of Disinfectants, 2501 Cassette St., Kansas City, Mo.

SANITARY HOG TROUGHS

Troughs that last and afford the best sanitary conditions are the kind the successful feeder and farmer have learned by experience are **BUCH'S** in the long run, and above all **SAFEST**. More fatal diseases arise from unsanitary feeding and watering troughs than any other one cause. It pays and pays well to use

Buch's Steel and Cast Troughs

They never wear out; can't breed disease germs; have no seams for food to lodge in; easily kept clean, thus avoiding stagnation, poisoned water. Cost a trifle more—but their durability and desirability make them far the cheapest trough to buy. Suppose you send for our catalogue No. 2. It's free, and tells how both money and stock can be saved with good troughs. Write today.

A. BUCH'S SONS CO., BOX 115, ELIZABETHTOWN, PA.

INSURE YOUR HOGS

The cheapest insurance you can get against hog cholera is in a package of **O. I. C.**, the hog cholera preventive that positively prevents swine diseases. If it fails, you get your money back. If it did not do the work, it could not be sold on such broad terms. Besides its preventive qualities it makes more pork on less feed in less time; destroys worms; cures thumps, scours; stops coughs; relieves hogs when smut poisoned, and insures rugged, robust hog-health.

O. I. C. HOG CHOLERA PREVENTIVE

Costs "10 per week per hog." Can you afford to neglect testing a remedy that costs so little and insures so much? Remember, we take all risk when you buy it—you take all risk when you fail to try it. Send for 5 lb. package, price \$1.50 prepaid. Book on hog cholera—how to prevent it, free on request.

O. I. C. COMPANY, BOX 0, SYCAMORE, ILLINOIS

Horse Owners! Use

Caustic Balsam

The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. **SUPERSEDES ALL CAUTERY OR FIRING.** Impossible to produce scar or bluish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circular.

THE LAWRENCE-WILLIAMS CO., Cleveland, O.

Debility, Poor Condition and Loss of Appetite

are a few of the many ailments from which animals suffer after experiencing the rigor of winter, and at the approach of Spring they also suffer from weakness and disordered digestion. A condition which is opportuned for the lodgement of germs oftentimes resulting in serious disease unfitting the animals for use.

Now is the time to use Foutz's Horse and Cattle Powder to condition your stock and strengthen their constitution to withstand the heat of summer and the extra drain of vitality required during that time.

This medicine is the oldest best known and most reliable animal tonic and conditioner on the American Market where it has been used continuously for more than 50 years.

For sale at all dealers or from us at the following rates:

Package 25c; 5 Packages, \$1.00; 12 Packages, \$2.00.

The David E. Foutz Co.,
Baltimore, Md.

Cutaway Tools for Large Hay Crops

CLARK'S REVERSIBLE
Bush and Hog Plow
Cuts a track 5 ft. wide, 1 ft. deep. Will plow a new-cut forest. His double-action Cutaway Harrow keeps the land true, moves 1800 tons of earth, cuts thirty acres per day.



No More Use for Plow
His Rev. Disk Plow cuts a furrow 5 to 10 in. deep, 14 in. wide. All Clark's machines will kill witch grass, wild mustard, charlock, hardhack, sundew, milkweed, thistle or any foul plant. Send for Circular to the

CUTAWAY HARROW CO., Higganum, Conn

Never Root Hog
Tamer & Ear Marker
stops rooting, all sizes, hogs grow and fatten quicker, marks all stock, marks registry number, valuable record. All for \$1.00, postpaid; hog holder 15c, both \$1.25; grass seeder \$1.25, all three \$2.25 by ex. Buncher \$3.00. W. L. Short Mfg. Co. box 22 Quincy, Ill.

BREED JERSEY REDS
They are good foragers and rapid growers. Easily fattened at any age and produce meat of finest quality. There's money in pure-bred Jersey Red Swine. Write for booklet.

Arthur J. Collins, Box A, Moorestown, N. J.

low grade of cement, and colored with yellow or red. There is no particular formula, and you just put some cement into the milk and a little of the color, and stir. The lime will settle to the bottom, and the mixture should be kept well stirred, while using, and no more made than can be applied before leaving for the day.

I took a butter-tub and mixed milk and color well; then dipped out three quarts and put in some lime till it was a thin paint. The cement or water lime varies, and I cannot give the exact quantity. It should be thin, so as to spread easily and enter the surface. It should be well rubbed, and not enough left on to form a thick coat. It works best on rough surfaces, as rather more can be made to stay on and the wood shows through less than on the planed boards.

The only danger is of getting it too thick and leaving on so much that later a sudden jar will cause it to flake loose and fall from its own weight. To get the best effect, there need not be enough on to allow one to split it off with a knife without taking the wood with it. We apply with a four-inch brush, or on old buildings with a scrub broom, and do a "wholesale job." At a short distance, after five years' wear, it has all the appearance of the best paint.—C. E. Chapman, in "Country Gentleman."

BLOODED STOCK

Why Breeders Fail

The National Stockman utters unfurlable truths in the following:

"It has been our observation that more men fail to become financially successful as breeders of live stock because they do not know how to advertise than for any other single reason. In the first place they do not consider advertising a part of their investment, regarding it as a luxury or something to be used in case they are not successful in otherwise finding a market for their stock. In the second place they do not make advertising a study and do not realize that the price of it is in keeping with the service rendered. We refer now to newspaper advertising exclusively. There are other kinds, but none other that is so cheap, that works so many days in the year, or that reaches so many people, as newspaper advertising. We are convinced, and so will any breeder who gives it a thorough trial, that the best results are obtained by a constant use of advertising columns. It is hard for a man to realize that he should advertise except when he has to; but as a rule the man who advertises constantly will not have to do any more in the end than the occasional advertiser to get the same results. He gets lower rates, he can use smaller space, and his business is always before the public, where it should be if he is to supply public wants."

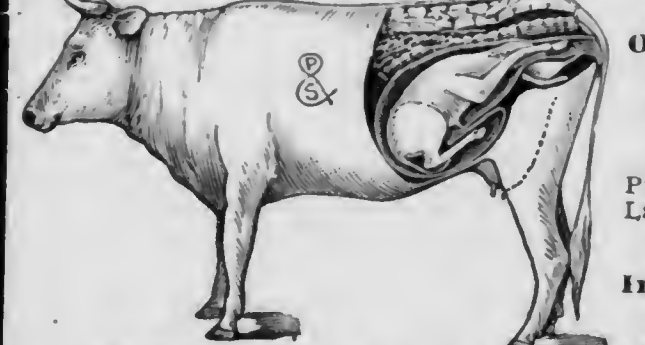
Thinks A Good Deal Of It.

Pleasant Hall, Pa.
The Lawrence-William Co., Cleveland, O.
I have used your GOMBAULT'S CAUTIC BALSAM for shoulder sweeney extensively. It is my standby. Think a great deal of it. J. A. UPPERMAN.

W. F. Harshman, Utica Mills, Md., in writing us says that he has a fine lot of pigs as well as boars and sows for breeding that he will sell reasonable. Mr. H. thinks his herd as good as any in the State. Now is the time to get in your order for the best. Write him at once.

"Easy to Use" PILLING CATTLE REMEDIES

Pilling Milk Fever Outfit—For Air Treatment as recommended by U. S. Department of Agriculture—sent Prepaid \$3.00—full directions.
Pilling Abortion Remedy—Used in connection with Pilling Breeding Powder. Now is the time to use it—price \$1.00, or large size (four times as much) \$2.50, Prepaid.
Make Cows Breed with Pilling Breeding Powder
Failure to breed, failure to come in season regularly, failure to clean. Full directions \$1.00, or large size (four times as much) \$2.50 Prepaid.
Pilling Injector Tube for administering Breeding Powder, \$.75 Prepaid.
Pilling Calf Scour—Good for calf or foal—a most successful remedy. Full directions \$1.00, or large size (four times as much) \$2.50 Prepaid.



GEO. P. PILLING & SON, Cattle Specialists
Established 1814. No. 2224 Arch Street, PHILADELPHIA, PA.

RELIEF IS SURE.

Spavin, Ringbone, Curb, Splint, all Lameness and Bony Enlargements cured quickly and permanently with

Kendall's Spavin Cure.

Spavin Cure a Wonder. Holders, N. E., July 29, 04.
DR. B. J. KENDALL CO.
Gentlemen—Enclosed find a two cent stamp for which, please send me your valuable horse book. I have used KENDALL'S SPAVIN CURE and it is a wonder. CHAS. A. HARKER.
Price \$1.00 per 25c. Greatest known liniment for family use. All druggists. Accept no substitutes. The great book, "Treatise on the Horse" free from druggists or Dr. B. J. KENDALL CO., Elmberg Falls, Vt.

SHORT-HORN BULL CALVES
Chester White Pigs; and Eggs from pure bred White Plymouth Rock Chickens. \$1.00 per 15.
JOS. T. FLEMING, Belleville, Pa.

MAPLE SPRING FARM
FOR SALE—Registered Holstein-Friesian Bull just large enough for service, descended from the best families of the breed, a fine individual.
J. S. WHITEFORD, Whiteford, Md.

MORGAN HORSES
or **JERSEY CATTLE**
If interested send for Bayside Farm Sale List
L. D. ELY, Rochester, N. Y.

REGISTERED HEREFORDS
Bull and Heifers at prices any farmer can afford to pay....
GEO. BISSELL, Ligonier, Pa.

BOSS PIG EXTRACTOR.
Every farmer send for set, \$1.00 by mail. Saves pigs alive. Not satisfied, money returned. Farmers for Agents can make hundreds of dollars in each county. Treatise on raising hogs with each set free.
H. MENDENHALL, Audubon, Ia.

Swine for Domestic and Foreign Markets

By J. J. Ferguson

Address delivered before the Minnesota Live Stock Breeders' Association, Minnesota School of Agriculture.

A review of the live stock markets during the year just closed shows that all things considered, it was one with a fair average of prices. The producers of market cattle, sheep and swine, all shared in the good times with the sheep men having perhaps the best of it. A forecast of the coming year is decidedly encouraging. Domestic markets are in healthy condition. Stockmen and packers unite in looking forward hopefully to such improved trade relations with the great meat consuming countries of Europe as may lead to steadily widening outlets for our surplus production of meats. Never before in the history of the live stock business have the producers and packers worked together so harmoniously for the general improvement of the live stock industry at large. Fortunately our large market centers have become as elastic as to capacity, with the packing houses so thoroughly equipped to handle all classes and grades of swine, that such a thing as congestion in the hog market is a practical impossibility. The packers have girdled the globe with their chains of distributing houses through which the farmer has a permanent and reliable outlet for anything which he may send to the market. Everything in the shape of a hog from six hundred pound stags or roughs, down to the fifty pound shipper is readily absorbed at its full market value.

A resume of hog prices at the Chicago market for the past six years, offers great encouragement to the producer of the market hogs. Prices have maintained a reasonable level, not having been subject to such wide fluctuations as were found in the markets for cattle and sheep. The producer of market hogs is always sure of a ready market at a fair price. This fact together with the proven ability of market hogs to return a maximum yield of meat for feed consumed, makes the production of high grade swine for meat purposes, the surest and most profitable feature of the live stock business.

In our wide extent of territory, with diversified conditions of soil and climate, resulting in a wide range of crop production, we naturally find a wide difference in the character and quality of the hogs produced in different sections. This is so true that we can readily divide our hog producing territory into well defined areas, each with practically a characteristic type of market swine. These types are largely the result of local conditions, the "lard hog" of the corn belt, being the "survival of the fittest" and the result of the special conditions found in the great corn producing states.

In the territory tributary to St. Paul, conditions differ widely from those in the corn belt. Corn is produced only to a limited extent; wheat, peas, barley, all nitrogenous or muscle forming foods, are grown abundantly. As a result of these natural conditions, the farmers of the Northwest may properly decide to meet the conditions ready to hand and produce the type of hog which has been found to thrive best under like conditions in older sections of the country. Following up the work already done we find the quality of many

hogs coming from this territory fully equal to that of the hogs produced so profitably in eastern Canada, England and Denmark. It would be a mistake for the farmer of Minnesota to introduce and adhere to the lard hog, since not only would it be impossible to maintain a high standard of the type under local conditions, but seeing that the high-class bacon hogs fit for the finest export trade may be produced, it would be a mistake financially.

In the practical demonstration which I gave with lard type, and bacon type hogs at the last Minnesota State Fair, I endeavored to show the difference between the two types. The ideal packer's hog as found at the western packing centers closely conforms to the following description:

A good barrow should have a smooth, well-finished appearance, possessing a symmetrical outline with well-balanced development in all parts. He should stand squarely on sound, strong feet, with well shaped limbs showing dense, firm bone sufficient to carry him

to a desirable finished weigh without breaking down. The head and neck should be of medium weight, shoulders and hams smooth and laid evenly with the sides, the former free from shield, with hams firm and compact. There should be no deposits or surplus fat behind the shoulders, over the loins, around the tail, head, or along the bottom lines. While the most desirable weight fluctuates with the demand for lard, the ideal packer's hog should come between the weights of 225 to 300 pounds. The heavier weights are not strongly in demand except during times when lard is wanted at good price. The average weight of all hogs received at Chicago during 1905 is 222 pounds, as against 220 pounds in 1904, and 237 pounds five years ago. The ideal market hog comes from no particular breed nor is he the result of any particular system of grading or cross-breeding. However, it is true that some breeds show a higher percentage of desirable market types. The description given of an ideal barrow may apply with modifications to pure bred sires and

EVERY DAIRYMAN NEEDS THE

Pilling Tuberculin Test

The greatest scourge of the dairy herd is tuberculosis, one affected cow will surely contaminate the whole herd.

Are your cows affected? Sure and easy detection by the Pilling Tuberculin Test.

Easy to use. You can do it. Absolutely no danger using the Pilling test; does not interfere with flow of milk or health of cow. Price with full directions, complete outfit serum for 10 cows, \$5.00 and \$1.25 for each additional 10 cows. No experience necessary. Illustrated Booklet Free.

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GEO. P. PILLING & SON No. 2224 Arch St. PHILADELPHIA, PA.

THE DUROC - JERSEY IS AT THE TOP

and there to stay. Write us and we will give you the facts that will convince you. We have the blood of Orion, Ohio Chief (recently sold for \$2000.00), Sensation, Sure Winner, Topnotcher, Kant-Be-Hat, Protection, Longfellow, Washington King, Go-Forward, Fayette Chief and High Chief, besides a string of other leading Western Winning Strains, the very cream of Duroc-Jersey Breeding. Our prices are low and the quality is high. We can save you money. Write at once and we will give you some Duroc Facts.

LESLIE D. KLINE, - - VAUCLUSE, VA.

150 Choice Chester White Pigs

Now on the farm for sale

Our 20 years experience aids us more and more in securing the best to offer you. We sell largely to old customers, who have learned by past experience that they can get high quality and just what they want. Can't here describe what I have but write for our large illustrated catalogue, giving breeding of herd, which you will see is the best.

JAMES FISHER, Eastman, Wis.

dams maintained for breeding purposes. A comparison of the demands of our domestic market with the British market, will show the latter insists upon lighter, leaner meats, finished at early weights. Heavy hams, shoulders and fatbacks of the lard hog are not wanted in Great Britain. When we seek bacon hogs suitable for the production of export bacon sides, we must look outside of the ranks of the corn belt breeds and types as ordinarily found. While it is true that under favorable conditions, some desirable bacon hogs may be produced from some of these, this cannot reasonably be expected seeing that they have for generations been bred for a widely different purpose.

Several years of experience in one of the best centers of bacon production in Canada have led the writer to conclude that first-class export bacon may most readily and profitably be produced from the distinctive bacon breeds such as the large English Yorkshire, Tamworth, and the large English Berkshire, perhaps in the order named. The ideal bacon hog must conform closely to a very critical standard. He may be of any breed or color, providing he meets the following requirements:

South St. Paul market pays a premium for bacon hogs weighing from one hundred and sixty pounds to two hundred pounds live weight. They must be smooth and even throughout with no patches, rolls, or hard places, presenting a maximum development of side, with great length and good depth, and a good covering along the bottom lines. These should be no flabbiness, but a smooth even covering of fat uniformly from three-fourths to one inch in thickness in an even layer from the crest of the neck to the tail-head, with a maximum amount of firm lean meat. Firm handling quality is one of the first essentials.

While numerous experiments at Canadian experiment stations have shown that bacon hogs cost no more per pound to produce than lard types, it is only fair to say that Canadian conditions are more favorable for bacon hogs than are those in our own corn belt.

I believe a ration of corn properly balanced will always be the cheapest for pork production, but at the same time, we know that the farmers of the Northwest, with the abundant and comparatively cheap feeds before mentioned, together with their favorable market for bacon hogs can successfully and profitably compete in hog production with the farmers of the corn belt states. To further encourage the production of high-class bacon hogs suitable for export, the packers at South Paul Stock Yards offer a substantial bonus for bacon hogs of prime quality.

We do not advise the average farmer to go in for what might be called extreme bacon types, but we do know it will pay the stockmen of Minnesota to grade up their present stock with boars of good type from the bacon breeds mentioned. Over the corn belt states many farmers are using boars of the bacon type breeds in order to introduce more vigor and bone into their herds which have become weakened from long continued feeding of exclusive corn rations. Strength of constitution is improved and prolificacy increased by the introduction of blood from bacon type.

The main thing for the Minnesota stockmen to bear in mind is that right now and in all probability for many years to come, bacon hogs of good type will bring them the largest profits.

What The Name Johnston Means To Farmers.

The name Johnston on farms implements has stood for everything desirable in farm tools for over half a century. The value of a firm name depends entirely upon the merit of the good they make. It is a very easy matter to claim high quality, but it is an entirely different thing to prove this in the goods themselves. For more than fifty-five years The Johnston Harvester Company of Batavia, New York, have been manufacturing a line of harvesting machinery and disk implements that has earned for them, both reputation and success, solely upon genuine merit, high quality and practical adaptability of the machines they make. Year after year, they have been governed by the experience gained through actual use in the field and in the shops, to the end that improvements have been continually added towards perfection, until now they stand at the head in their line. This is evidenced by millions of their implements in actual use by farmers throughout all sections of this country. Unsolicited testimonials in favor of these implements prove that they are about the average. Another thing which accounts for their success, is that they started out years ago as independent manufacturers of farm implements, and they are absolutely independent today. Being unhampered by any connection or dictation of the Harvest Trust, they have had uninterrupted progress both in the development of their implements and in the method of selling them to the farmer. Their line of machinery includes Grain, and Corn Binders, Chain and Gear, Drive Mowers, Rakes, Tedders, Reapers, Harrows, Cultivators and Spring Tooth Harrows.

It will certainly pay our readers to send to The Johnston Harvester Company for their catalog of the Johnston line of "not in the Trust farm tools." Their advertisements on these different farm implements will be found elsewhere in this paper from time to time, and if you desire special literature on any particular machine this can also be had upon request. We are satisfied that the Johnston machines can not only be bought at a saving in price but that the many satisfactory advantage of these machines will prove an additional saving that cannot be equaled by any other line.

When writing for their catalog be sure to mention Blooded Stock and your inquiry will have prompt attention. Although the most neglected stock on the farm, sheep are, nevertheless, the most profitable the farmer handles. What are you doing about a rape patch? Don't deny your sheep and lambs the luxury of a rape field if you are looking for the best results and for the highest self satisfaction.

There has not been a year in twenty when the growers in wool were holding so tenaciously to their clips as this season, and all in expectation of an advance over last year's prices, and this tenacious holding is what is upsetting the calculations of local wool buyers.

We do all kinds of Job Printing. Send us your work, it will be promptly done. Write us about it.

We do all kinds of Job Printing. Send us your work, it will be promptly done. Write us about it.

Don't wait until June or July to advertise your show stock, or anything else, if you expect the ad to do very much good for this season. Buyers are buying earlier than ever before, especially of rams, and the man who has them to sell should take time by the forelock.

OAKDALE FARM

Property H. A. DANIELS.
R. D. 5, - - Millington, Mich.
Exceptional advantages to introduce our LINCOLN SHEEP CHESTER WHITES } to readers of SCOTCH COLLIES } this paper. Write your wants immediately. Special offering Scotch Collies and Chester Whites now on hand.

Chester Whites

For years I have been selecting and breeding to build up a herd that would be uniform in shape, stamping other herds with the good qualities that I had succeeded in fixing in my herd. If in need of first-class Chesters come and see me or write your wants. Only the best sold for breeders.

T. A. STEVENSON, Shannon City, Ia.

ENON HERD CHESTER WHITES

Have some extra choice Fall pigs both sexes. If you are looking for good ones write me: Barred Plymouth Rocks, best strains. Birds for sale. Eggs in season.

D. W. SHELLABARGER, - ENON, OHIO

Chester Whites

I have them combining the best blood in Chester County. If you want the good old Chester that has made this county famous, we have them here that will please you. We breed and sell only the best. Write me.

C. L. WEBSTER, - Kelton, Pa.

OUR Chester Whites

in demand in U. S. and Canada. We have all ages, both sexes. We can't give you a BAR-GAIN unless you give us an order. Try us once you will order again. Stock worth the price our motto.

N. P. KERSHNER & CO., Ansonia, O.

OAKVIEW HERD -OF- POLAND-CHINAS

I have the best Poland-Chinas now for sale that I ever owned. 20 Head of March and April Sows sired by "Ohio Sunshine," bred to farrow in April. They are large and strong boned. Choice Aug. and Sept. pigs of both sexes. Spring boars all sold. Write for particulars.

W. H. CRESWELL, R. 3, Cedarville, O.

I OFFER

3 Fine March Boars
2 Fine April Boars
1 Fine June Boar

A few choice sows ready to breed and a lot of September and October Pigs. I think them as good a lot as any person can show. Write me about what you need.

J. H. YARNALL, Kelton, Pa.

INCUBATORS

This is the season when the poultryman's interest centers in his incubators. With the approach of spring he anticipates the advent of a large number of fluffy little balls of down which are later to be developed into the profits he must make in order to successfully carry on his business. Any failure on the part of the machine at this critical juncture means serious loss, not only of money invested in eggs, but time wasted in producing a poor hatch—not that hatching is such a difficult matter, because there are many devices which will hatch chickens, but the point to be considered, is to get the machine which

SHOEMAKER'S BOOK ON POULTRY

AND CALENDAR FOR 1906. CONTAINS 100 PAGES. MANY COLORED PLATES TRUE TO LIFE. All about chickens, their care, diseases and remedies, incubators and how to operate them, poultry houses and how to build them. PRICE ONLY 10c.

G. G. SHOEMAKER, Box 88, York, Pa., U.S.A.

SINGLE COMB BROWN LEGHORNS, BUFF ROCKS. Eggs \$1.50 per 15. **Pekin Ducks** Eggs \$2.00 per 11. Have won wherever shown.

L. H. SNIDER, AUBURN, IND.

The Wisconsin HERD of DUROC JERSEYS

Have for sale 100 registered pigs of February and March farrow. Are bred from the most noted and up-to-date strains of prize winning stock. Write me before you buy. It will pay you. Will ship pigs after May 1st.

W. H. REED, Whitewater, Wis.



OAKVIEW HERD

-OF-

POLAND-CHINAS

I have for sale 10 Head of Choice Gilts of Last of April farrow, bred to "Handsome Sunshine" for May farrow. Also choice fall pigs of both sexes. Special price next 30 days to make room. For particulars address:

W. H. CRESWELL, Cedarville, O.



POLAND-CHINAS

of Best Strains

CHEAP

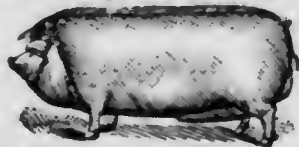
Pigs by Mr. Black Mischief Maker. 33711 and Siefker's Sunshine 10149. Dams are by 10 different noted boars. I have shipped to 19 states. Satisfaction guaranteed. Write for circulars and particulars before you buy.

A. F. SIEFKER

St. Charles Co., DEFIANCE, MISSOURI

CHESTER WHITES

Good Enough for Any Herd



I have young boars. October farrow, sow same age, will breed them if desired. If you are looking for a fine pig, spring farrow, bred so that they will produce good animals, write me. One half in purchasing is to get an animal that does not trace to any poor animal.

Have 50 early March pigs

Write at once for what you want and let me tell you about what I can do for you.

C. M. GRIFFIN, Charleston, Ill.

BLOODED STOCK

will unquestionably hatch the largest number of strong, vigorous chicks, with the least expenditure of time, labor and money.

As a standard of excellence in these respects the Reliable Incubator will meet every requirement. The system of heating and ventilation employed in the 1906 Reliable so perfectly controls the temperature and moisture, that, providing the eggs used are of the proper fertility, results can be guaranteed almost to a certainty. While the system embraces the most advanced and practical ideas in the principles of incubation, it is extremely simple in operation, requiring little care to run the machine, and relieving the operator of all unnecessary labor.

No artificial moisture is required, and as the lamp, burners and chimneys are made entirely of metal and so constructed as to be perfectly safe from explosion or catching fire, this machine is an ideal one for the poultry raiser.

The many years which the Reliable Incubator & Brooder Co. have been before the public have established their reputation for producing a most excellent line of poultry appliances. The machine they offer the present season are fully up to their previous standard of excellence, besides embodying further improvements. A complete description of their incubators and brooders will be found in their catalog, which they will be pleased to mail free of cost to anyone who will address The Reliable Incubator & Brooder Co., Quincy, Ill., requesting a copy of same. When writing kindly mention this paper.

BOONE COUNTY WHITE SEED CORN

Greatest yielder of medium early varieties, 105-110 days. Pure bred, raised from registered seed carefully selected, \$1.50 per bushel in the ear.

EMIL ANDERSON, PAXTON, ILL.

We do all kinds of Job Printing. Send us your work, it will be promptly done. Write us about it.

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent or exchange, poultry, poultry supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants, and vegetables. The cost of advertising is

Only Two Cents a Word, all classified. Each initial or number counted as one word. No advertisement taken for less than 25 cents each issue. All replies must be sent direct to advertisers. Cash covering the exact number of words at 2 cents each must be sent with every order.

This Department for Live Stock Only.

CATTLE.

SUNNY SLOPE HERD of Red Polled Cattle—the best and dairy breed. Choice young stock for sale. L. H. WALKER, Reed City, Michigan.

JERSEYS—Combination and Golden Lad. For sale—10 cows, 10 heifers and 20 bulls. S. E. NIVIN, Landenberg, Pa.

HOGS.

HOG EXPERIENCE, in every month's issue of *Pedigree Stock*, Saratoga, Ind. One year for 10c if you send names of five stock or poultry breeders.

REGISTERED DUROC SWINE, eight week old pigs and service boars. WM. HARSHMAN, Utica Mills, Md.

CHESTER WHITE PIGS, \$4.00. Rose and Single Comb Buff Leghorn and Orpington eggs \$1.50. Short Horn Cattle. ORCHARD GROVE YARDS, Loganville, O.

POLAND-CHINAS, Choice spring pigs from registered stock. Prices to sell. C. O. CARMAN, Trumansburg, N. Y.

PURE BRED Chester White Pigs at all times, \$10 per pair and up. WILL H. CARL, Ellysburg, Pa.

LARGE English Yorkshires, sired by "White Side Comet". CHAS. S. SNOOKS, Utica Mills, Maryland.

FOR SALE—O. I. C. Swine, including pigs and sows bred. W. C. CRUSER, Montrose, Pa.

POULTRY

BRED TO LAY FOWLS—All varieties—Wyandottes, Plymouth Rocks, R. I. Reds, Indian Games, Leghorns, Minorcas, Cochins and Seabright Bantams. 1st prize winners Orange, Ulster, New City, Walton, "Owego" fairs 1905. Eggs and stock for sale. Registered—O. I. C. Swine (all ages). Prices right. Write wants. WALTER G. SNIDER, Walden, N. Y.

POULTRY CATALOGUE FREE—Wyandottes, Keds, Barred Rocks, White Leghorns, Bronze Turkeys. Satisfaction guaranteed. Reasonable prices. FAIRVIEW FARM, Shrewsbury, Pa.

NELSON'S guarantee a fair hatch from their famous egg producing strains of Barred Rocks and Brown Leghorns. Write NELSON'S, Grove City, Pa. R.F.D. No. 12.

100 TURKEYS, Selected stock. Mammoth Bronze, White Holland, Buff and Narragansett. Eggs \$2 per 11, 15 varieties. Poultry eggs \$1.00 per 15. S. DUKIG & SON, Armstrongs Mills, Ohio.

BUFF ORPINGTON eggs \$5.00. Barred Rock eggs \$5.75c. Also Barred Rock Stock, Hens and Roosters \$1.25 each. Berkshire pigs cheap. W. A. LUTHERS, Lack, Pa.

WHITE WYANDOTTES. Write CHAS. DARONE, York, Pa., Specialist.

MAMMOTH Pekin Ducks, Buff Orpingtons and White Wyandottes, eggs \$1.50 15. MARY DARONE, R. 6 York, Pa.

FANCY POULTRY Eight colored page price list free. Address: G. G. Shoemaker, Box 88, York, Pa.

WHITE and BARRED Plymouth Rock fowls and Mammoth Bronze Turkeys. R. H. McFADEN, Oxford, Pa.

EGGS for Hatching—Rose Comb Rhode Island Reds. Price \$1.25 per 15. D. C. HUTCHISON, Oxford, Pa.

BARRED P. ROCK Cockerels. First-class birds. Write me. GEORGE C. FOWLEY, Oxford, Pa.

WHITE WYANDOTTES, choice stock. Eggs \$1 per setting. F. L. VANDERHOOF, Jewett, Ill.

SINGLE COMB Rhode Island Reds Exclusively. 15 eggs \$1.50. LEWIS STEWART, Erie, Pa. Box 128.

MISCELLANEOUS

SQUABS are ready for the market in four weeks—bring big prices. A profitable industry. Get started this spring. Rent for booklet. The L. H. GIBBS SQUAB CO., Box 444 Clinton, Mass.

Money in Squabs. Our Free Book posts you. Pi-sure and profit with little work. **EASTERN SQUAB CO.**, 30 Hawley St. Boston, Mass.

FOR SALE—Shetland Ponies, Ferrets, Poultry, Pigeons, Pheasants, Rabbits, Guinea Pigs, Goats, Cats, Dogs. 2 cent stamp for circular. Col. Joseph Leffel, Springfield, Ohio.

DOG, HOGS, PIGEONS, FERRETS, BELGIUM HARES, for sale all kinds. 8 cents 44 page illustrated catalogue. C. G. LLOYD, Sayre, Pa.

Little Danger of Exhausting the Vitality of the Cow

Does the production of butter exhaust the vitality of the cow and render her less valuable for breeding purposes, is a question which is exciting a good deal of attention in various parts of the world. The assertion has been made that the extraordinary yields of butter which certain dairy cows have produced are so extremely exhausting to the animals, that there is a loss of vigor both in cow and her progeny. It is very questionable, however, if this assertion can be supported by any well authenticated facts. It is commonly supposed that animals can be forced to go beyond nature's limit by a system of high feeding, that hens can be forced to lay large quantities of eggs, and cows to produce immense yields of milk. But unless drugs are used to cause abnormal activity of the organs of secretion, animals never exceed their natural capacity. As a matter of fact very few come up to it, owing to the lack of intelligent feeding. So far from the vitality of cows being exhausted by a system of feeding which causes them to produce the largest amount of butter in a given period, it is the very animals which have most distinguished themselves in the dairy that have produced the famous butter cows and bulls of succeeding generations. The American cows which have yielded such enormous quantities of butter are all descended from ancestors that have also been famous. A dairy cow is a very complex machine for converting food into milk, and, notwithstanding all that may be asserted to the contrary, the weight of evidence goes to show that in order to maintain the milk or butter producing powers for the greatest length of time and to obtain the most profit, the machine should be run at its fullest capacity. No farmer in this state need be afraid of injuring his cows, or impairing their constitutional vitality by feeding with a view to obtain the largest possible returns.

Individual butter yields are of special interest to every owner of a dairy herd, since they show the value of breeding on lines that are undoubtedly hereditary, and also emphasize the necessity of feeding in proper foods in suitable quantities so that the cows may be as productive and profitable as nature will permit. The advice, not to be afraid to feed the dairy cow liberally, may possibly be considered sarcasm, because the prevailing custom is not to feed them half well enough; but I give it in the hope that some dairy farmer will be found enterprising enough to establish an Australian butter record and thus emulate America.—The Australasian.

300 Head Poland-Chinas

Seventy-five Sows, bred, will be sold to make room, price \$25.00 up. Others ready for service. Have a grand lot of boar and sow pigs all ages. No better animals or breeding. Write at once to

CLAUD WILKINSON, - Cynthiana, Ind

BLOODED STOCK

STONE HOUSE STOCK FARM. N. H. Hood, Adrian, Mich. BREEDER OF THE WORLD'S BEST O. I. C. SWINE and SHROPSHIRE SHEEP.

Stock for sale at all times of the most approved strains. Satisfaction guaranteed. I have a select herd of quality and shall be pleased to supply the wants of any breeder or farmer who appreciates the best obtainable. Write me your wants before buying. Come and see me when you can. Call at Dr. Gibson's livery; carriage at my expense from Adrian.

STRICTLY PRIME LOT OF GILTS AND BOARS

from the best of breeding. Nothing but tops shipped. These gilts and boars are nearly all sired by my Bold Baron and out of some very choice English and American bred sows that are known to be the best breeders. Write me and state what you want and I will please you. The Clover Leaf Herd of Berkshires are famous for their extremely good quality and individuality.

CLOVER LEAF FARM, STANLEY, N. Y. E. E. HALL, Proprietor.



SEND 3 PEDIGREES FOR RECORD AND \$1.00. Will Register any breed Swine once at this rate to show you our way and Save Your Dollars, make lasting friends, patrons, members. Write us of your business fully. Save 40 per cent. in fees alone. We send you complete information free for asking. **U O to know** what others know. **Memberships, all departments, only \$5.00. Lowest Fees.** We will exchange membership with any other Association at par value free. Now consolidate your business with us. Every breeder sending \$1.00 as above this month will also get this paper free to January 1, 1907. **Be Prompt To-day.** International Consolidated Record Association, Penn Yan, N. Y. Wear badge pin—\$1.50 per paid.

ABERDEEN-ANGUS CATTLE BUY A WINNER—A MARKET TOPPER

The Angus cattle have captured more firsts and championships at the great fat stock shows than all the other breeds together. Why? Because they require less feed, feed easier, carry a maximum of the high-priced meats and a minimum of the cheaper cuts and offal, and will invariably outsell cattle of other breeds. We have them for sale of the most popular breeding. Our prices are within the reach of all. We solicit your correspondence and invite you to come and see our stock.

Meissner Bros., - Reinbeck, Iowa.

Here's a Subscription Proposition That Can't Be Beat. More Real Value in Brains and Beauty Than Has Ever Been Dished Up Before.

	Regular Price	Send
"The Book of Live Stock Champions".....	\$1.50	\$1.50
"Irrigation" one year.....	1.00	to
"The National Farmer and Stockgrower," one year.....	.50	"Irrigation" and you
	\$3.00	Get Them All

"THE BOOK OF LIVE STOCK CHAMPIONS" is a cloth-bound, gold stamped volume of 240 pages and weighs 24 ounces. The features about it is that it contains handsome half-tone engravings, printed on heavy plate paper, of cattle, sheep, hogs, horses, ponies and mules that have taken championship prizes in the United States since 1900. Full descriptive matter accompanies each illustration. There are 500 of these beautiful studies, every one of them fit for framing. They are the quintessence of the photographer's and engraver's art. It is up to date—the edition of 1905. It is the only work of its kind extant. It is the kind of a subscription premium proposition to which "Irrigation" patrons are entitled, for they get the best for their money when they buy "Irrigation" and this is a gift of appreciation for that patronage. Every lover of live stock, every student of live stock will be losing valuable and indispensable information should he fail to possess a copy of this book.

"IRRIGATION" is the best—because the most practical—monthly farm magazine published in the West. Its pages are filled with articles that will benefit every man, woman and child who prefers to live next to nature in the Great West, to till the soil, to be independent of the rush and roar of the maddening cities—it tells them every month how to apply water for irrigation to their land; it tells them how to prepare their ground, how to build their ditches; it tells them how to conserve the moisture for "dry farming" in sections where irrigation is impossible; it tells them what kind of seeds to plant for grain in the semi-arid sections so they may harvest bountiful crops; it tells them what other classes of products to give their attention to, so that they may prosper, without spending years in experimenting, in their new country. It is a magazine of profit to the subscriber.

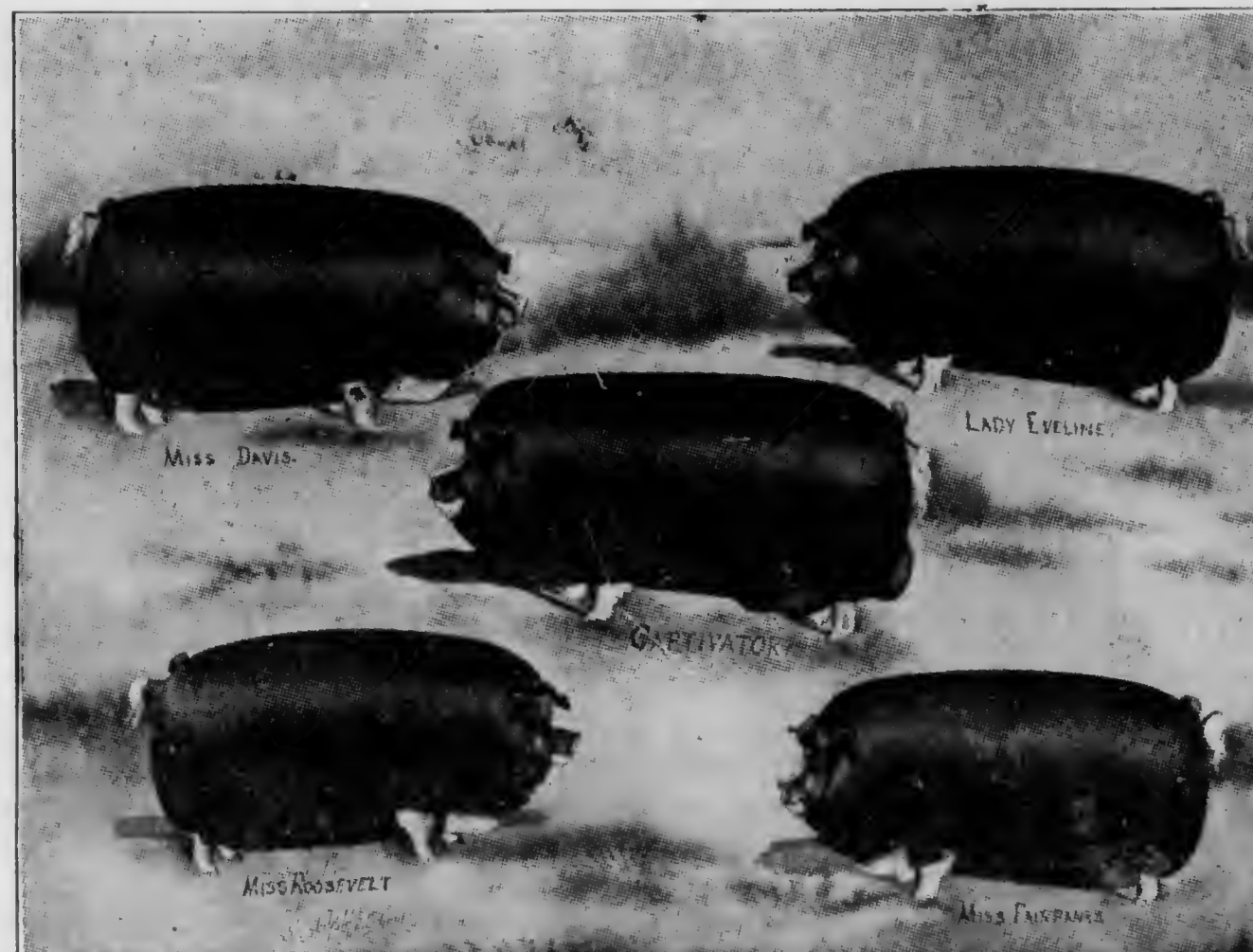
"THE NATIONAL FARMER & STOCKGROWER" is one of the old established farm journals of the Missouri river country. Very ably edited by one of the ablest writers in his line—Mr. Phillip H. Hale. It is now in its fifteenth year, and like good wine, has improved with age. There are within its sixteen pages of five columns each all sorts of good reading for the farmer, his wife and his children. It is a fitting companion to "Irrigation" and we are pleased to offer it in a clubbing arrangement.

So We Say Again—"Irrigation" Herewith Offers the Best to Be Obtained Anywhere for the Money.

Send \$1.50 in Post-Office Money Order, Express Money Order or Stamps (Not Checks)

Your name goes on the list of "Irrigation" and the "National Farmer and Stockman" for One Year and inside of ten days from receipt of the money you will receive postpaid a cloth-bound, gold stamped copy of "The Book of Live Champions." Address:

IRRIGATION PUBLISHING COMPANY, 600 Club Bldg., DENVER, COLO.



"International Stock Food" is prepared from pure, medicinal roots, herbs, seeds and barks and is fed in small amounts as an addition to the regular grain feed. It Purifies the Blood, Cures and Prevents Disease, Tones up and Permanently Strengthens the Entire System and greatly Aids Digestion and Assimilation so that each animal obtains more nutrition from all grain eaten. Sold by over One Hundred Thousand Dealers on a "Spot Cash Guarantee" to give you paying results or your money promptly refunded. WE HAVE THOUSANDS OF SIMILAR UNSOLICITED TESTIMONIALS ON FILE IN OUR OFFICE. TEST IT FOR YOUR PIGS, SHOATS, HOGS OR OTHER STOCK ENTIRELY AT OUR RISK. GUARANTEED TO MAKE YOU EXTRA MONEY.

DAN PATCH 1:55 1/4 IN 6 BRILLIANT COLORS

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We Have A Beautiful, Six Color Lithograph of Our World Champion Stallion Dan Patch 1:55 1/4. It Was Made From Photograph And Shows Dan Hitched To Sulky And Pacing His Fastest Clip. It Also Gives All Of His World Records. This Is A Splendid Horse Picture For Framing. It Is The Most Life Like Picture Ever Taken And Shows Dan Flying Through The Air With Every Foot Off The Ground. We Will Mail You One Copy Free, Postage Prepaid, If You Write Us And State How Much Live Stock You Own And Name This Paper. Address INTERNATIONAL STOCK FOOD CO., Minneapolis, Minnesota, U. S. A.

Don'ts for Hog Raisers

Some time ago John R. Gentry, formerly manager of the Berkshire Department of the Billmore farm of North Carolina, the famous fancy farm of George Vanderbilt, delivered an address before the New York Farmers' Club, an organization of millionaire farmers of the big city. He gave them some advice about handling hogs on the farm. Some of his "don'ts" may interest our readers. Here are some of the things which Mr. Gentry says should be avoided:

Don't think the sow can take care of her young without any assistance whatever with the thermometer below zero.

Don't forget that a good bed is necessary at all times, but more especially at this season of the year, and that it should be free from dust and dampness if you expect the pigs to thrive.

Don't fasten the sow up in a small pen, from which are expelled all air and light, as sunshine and fresh air are two of the best disinfectants known in the world.

Don't go to the best herd you can find in the United States and buy one of their best sows with which the greatest pains have been taken to produce the greatest symmetry and size, take her home and turn her into a bare lot, and without proper food and attention expect her to go on and reproduce herself. While the boar is rightly considered half the herd, yet, as one writer has stated in regard to cattle, the

herdsman comes near being the other half.

Don't put off buying a boar to mate with your sows until you are ready to use him, and then write to half a dozen breeders and take what you can find left. The male to be used on your sows should certainly be bought six or eight months in advance, not only that he may become acquainted with his quarters, but that you can rightly study the weak points both in him and your sows, in order that you may make proper mating.

Don't breed a male with a defect to a sow with a similar defect, as you will thus intensify the weak points. To illustrate, the boar that is deficient in ham, if bred to a sow weak in the same point, will produce pigs weaker in a greater degree in that point. Then when you cross a male and a female both good in the hams, you will in a majority of cases, increase the hams, but not in as large a ratio as you can decrease them by improper mating.

We do all kinds of Job Printing. Send us your work, it will be promptly done. Write us about it.

Breeders Who Win Premiums Are The Men It Pays To Follow.
CHARLES E. KELLER
BREEDER OF
Leading Strains of Poland China Hogs.
NEWARK, OHIO, Jan. 17, 1906.
INTERNATIONAL STOCK FOOD CO.

GENTLEMEN:—You will find under separate cover a picture of my Poland China show herd. You also will find enclosed a record of their winnings from World's Fair at St. Louis, 1904, down to the present time. As my hogs were prepared for the show with the use of your "International Stock Food," I thought perhaps you would appreciate the picture, as it might prove valuable for your bulletin, as they have an unequalled show record. At the World's Fair the litter from my great sow, Lena Perfection, won eight ribbons, which is an unequalled record. I also exhibited seven head at St. Louis and won nine money prizes and Reserve Champion. My winnings at State Fairs have been remarkable in show ring history. "International Stock Food" is a great and reliable preparation.

CHARLES E. KELLER.

A MARK HERE means that this paper is sent to you as a sample copy. We wish you to look it over and we feel that you will find it one of the best live stock papers you ever read. Below you will find our subscription offers and trust to be favored with your order.

SUBSCRIPTION BARGAINS

- No. 1. Single subscription, 25c a year.
- No. 2. Send four new subscriptions at 25c each for one year and get your own subscription advanced one year, free.
- No. 3. Send us \$1 and have your subscription advanced 5 years.
- No. 4. Send us \$1 and have your subscription advanced four years and get your choice of recipes for Scours and Thumps or Plans for building a Hog House.

CLUBBING BARGAINS

Successful Farming, Des Moines, Ia. This great agricultural paper has won a name in the corn development now going on in the West. How to select seed, how to plant, how to cultivate so as to increase the bushels per acre is important to every farmer. This paper and **Blooded Stock** both one year for 40c.

Agricultural Epitomist, Spencer, Ind. is a great monthly farm paper printed out on a big 320-acre farm, where experiments are conducted by experts and the results published in the paper. This makes it a paper of great value to the business farmers who want to keep posted on the best and latest methods. This paper and **Blooded Stock** both one year for 40c.

Farmers' Voice, Chicago, Ill. is one of the finest illustrated farm monthlies published. It is a regular family paper, concerning not only the farm topics but also the household, making it one of the most valuable papers printed. Every issue is worth the subscription price. This paper one year, along with **Blooded Stock**, for 65c.

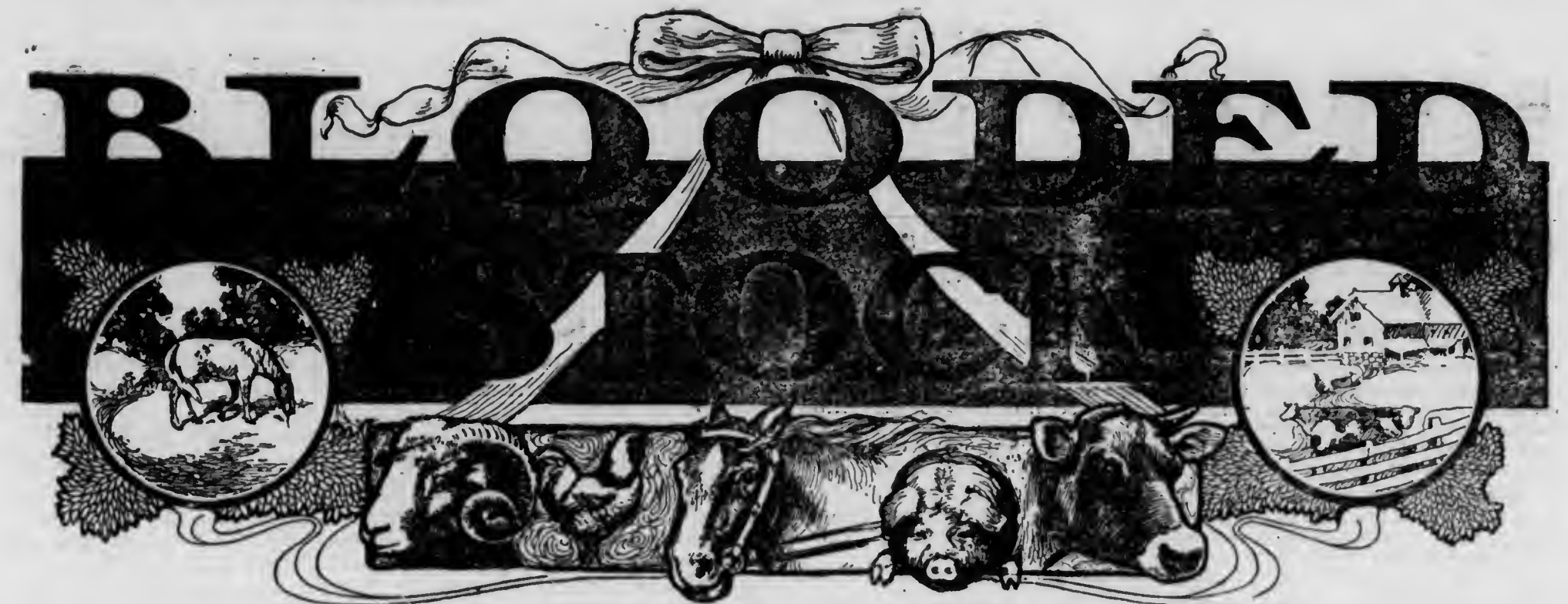
All three papers, along with **Blooded Stock**, one year, for \$1.00.

You cannot get a better combination of valuable information than this offer, for the money, anywhere. Send your order at once to

BLOODED STOCK, - OXFORD, PA

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VOL. XII.

OXFORD, PA., MAY 1906.

No. 3

Breeding as a Business

During the World's Fair Cattle Show, Hon. John D.yder, commissioner of agriculture of Canada, addressed the Stock Breeders and the Agricultural students in Live Stock Congress hall, under the auspices of the American Breeders' Association, President J. H. Sheppard presiding.

To be able to plan and carry to completion a modern city building, without a mistake or a misfit, or to build one of the great floating palaces now used for commerce on the ocean, are feats worthy of the twentieth century. Scientific knowledge is essential to those who undertake such tasks; and accuracy in every detail of workmanship can alone lead to success. The whole world gives its meed of praise to those who undertake and carry forward such enterprises to completion.

But these men are dealing with dead matter which can be seen, which can be measured to the closest fraction, and shaped according to the will of the builder. How much more credit, therefore, is due the man who, dealing with living matter shaped under influences which he can only indirectly control—trying to build what his eyes cannot see, and yet with an ideal in his mind, and working year by year nearer its approach—he eventually succeeds in presenting for your inspection a living animal, healthy and vigorous developing for you thick flesh in the most desirable parts, and, withal, keeping an eye to beauty and symmetry, so that the animal delights you as you gaze upon it. I assert that such a man deserves far more credit, and is in the highest sense a more worthy builder than he who deals only with stone and wood and iron.

Especially is this true when it is remembered that the ideal cannot be reached in one generation. A single individual may be produced, but that is but a beginning. What the breeder aims at is uniformity in his whole herd or flock, all being of one type, and that type of the greatest excellence possible.

Let it be conceded at the outset that this will never be reached by accident or in any hap-hazard way. It must be by carrying out a well considered course, intelligently planned by one conversant with all conditions with which he has to deal. The man who builds a herd or flock or stud is in precisely the same position as he who erects a building or a ship. The result or the outcome of his work must first

exist in his own mind. The chief difference in the two lies in the fact that in the first case the builder will be able, before he commences his building, to place his model on paper, while the latter cannot do so, nor can he perfectly show it to another. But, I repeat, the ideal which all his work continually points must be ever present in his own mind.

I am not setting forth the course of the ordinary breeder, but rather of the man who has by diligent application of correct principles, reached such results as prove to the on-looker his sound judgment in the selection and mating of his animals. Such men, I admit, are not numerous, but they have lived in the past, and have shown to the world marvelous results. I have had the very great pleasure of coming in contact with a few such men who have been prominent in successful work of this character in recent years. The late Mr. Cruickshank of Sittoung fame, was admittedly one such man working with a definite plan for the perfecting of his Shorthorns. Andrew E. Mansell, had he continued in England, would undoubtedly have proved his right to be classed in the same list as he perfected his flock of sheep. Others are working along the same lines at the present day, but they have not yet arrived at their conclusions. The vast majority, however, are working entirely at random. How many men in any given township in your state could give you a intelligent reason why they are using a certain horse or what they expect to produce by the mating proposed? They hope to produce a living colt, but the precise type is a mere guess. I am not going too far when I say that the vast majority of the breeders of live stock on this continent are following, in part at least, the same happen-chance methods. To some extent good results are seen, but my point is that it is not generally the result of any definite plan. A male animal is selected which happened to be a wonderfully prepotent animal and the result is satisfactory, but he is probably followed by one which tends to spoil the former success, and it may be years before the own-er can happen on another.

I am ready to assert that the results of mating animals together are controlled by certain definite principles, and it should be our constant study to discover what they are. The subject

ought to be more frequently discussed, so that by a comparison of ideas from different conclusions may be more rapidly reached. After all you can do, the fact will remain that the most successful breeder must depend on his own judgment and intuition for success. So much must be taken into consideration; such nice balancing of points. For instance; a grand and masculine head against a weakness of the loin, where the choicest of cuts are obtained; a noble carriage, but lacking in width of chest—which ought to be taken? An unlimited number of problems are always facing you, and that close keen judgment which always chooses the best under the circumstances is seldom found in one man. It is so natural for most men to always see one or two points and miss altogether others that may be of greater value. The color of the horn or its particular shape, seems to some more important than the covering of flesh, the quality of which they may not feel competent to judge. Others may be enamored of a level rump, while they do not see a narrow chest; and still others with entirely different points, which are always in view while others are unnoticed. Such persons can never reach anything like perfection. The whole animal must be considered, and as none are absolutely perfect, the greatest ability to evenly balance the various points always wins in the result.

There are some things which in my opinion ought to be considered as essential. A horse which is used to draw a load or travel long distances, no matter how handsome, is useless without sound limbs and good feet. A cow kept for dairy purposes with beautiful conformation but no milking propensity is utterly useless. A beef animal which cannot be brought to selling time under four or five years, is but a cumberer of the ground and gives no profit. The essential points ought always to exist, but if not, then the skill of the breeder must supply them by proper mating, or his breeding operations will prove a failure.

The essential point cannot well be named in this address, for the reason that they differ in different species. For instance, an essential point in a dairy cow is ability to give milk in sufficient quantity and of proper quality, no matter what else exists, this must always be essential. A beef animal must be of the early maturing kind.

2

BLOODED STOCK

FOR PRACTICAL STOCK BREEDERS AND FEEDERS

PUBLISHED MONTHLY AT OXFORD, PENNA.

UNDER EDITORIAL MANAGEMENT OF C. E. MORRISON.

Questions—Subscribers of the paper are at liberty to ask questions on any subject concerning which they desire information, and these questions will be answered as promptly and carefully as possible, either through the paper or by mail. When asking for information always enclose a 2-cent stamp for postage in case an answer by mail is necessary.

Advertising Rates sent on application.

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Don't try crossing breeds. Nine times out of ten you loose. Why should you expect to do more at a single cross than it took others years to do. Taking two breeds that have been bred for generations for different purposes their temperament point to different results and crossing is only a trial of the resistance of the two temperments and you get nothing profitable for your time and expense. Let it alone.

Don't put off looking up any breeding animals that you may need. Start early and do it carefully, paying particular attention not only to the pedigree but to the animals name in the pedigree. Each animal should individually be of the type that you are looking for. When you secure a male that is what you wish and each animal named in his pedigree is such an animal, then you possess an animal that should prove valuable as a breeder. If at any point in the pedigree this uniformity is broken, that point will be the stumbling block in your breeding and in your breeding you will find all your trouble pointing to such breaks.

For a general purpose horse there is nothing that will as near fill the bill as the selection of the trotting horses. Now don't say hold on Mr. Editor. No, think yourself. There is not a horse to-day that will command as good a price as a good shaped trotting bred horse weighing 1200 to 1300 pounds unless he can trot in about 2.10 or less. The point we wish to make is that if farmers want a good general purpose horse they will be far better off, make more money and come nearer having what they want by selecting mares with good form and sired by the largest and best trotting bred sires using no mare weighing less than 1200 pounds or that was sired by a horse weighing less. Breed such mares to well developed nicely turned stallions weighing as much over 1200 pounds as possible. The better the trotting record that these horses have the better, but select stallions that are built for business all over. Don't allow your admiration for a smaller horse to get the best of you, but keep in view, size, quality and your aim. Do this and you will raise horses that will not only do your farm work but your driving and be a source of great profit and much pleasure. Such horses are always in demand at good prices. They make the fine carriage horses wanted both in the city and country. Don't try to get them by crossing the heavy draft on the small trotter. If you do you may get a fair horse but the quality that counts is not there. You only get quality through a line of selections from the same blood. Crossing only tends to coarseness.

Subscription Notice.

We endeavor to notify our subscribers by letter when their subscriptions expire and ask for a prompt reply so that we may know their wishes regarding continuing Blooded Stock. If we do not hear from them within a reasonable time we write them again and then discontinue the paper. We do not ask for any pay for the issues sent after subscriptions expires. If you are not willing to pay our subscription price we are not going to send it right along free. We will not ask people to pay for what they do not want or to receive the paper free. We wish you to be one of our subscribers but if you do not want the paper that ends it.

A large number answer our letters and send renewals promptly while in a month or so some one will write that they notified us several times to discontinue the paper, when the statement was a pure lie. Now this is not necessary. One notice will do and if you let it alone the paper

BLOODED STOCK

will be stopped without any notice from you, but we would prefer to have you answer our letters. Under any condition do not tell what is not so, if you have to do this, don't write at all.

Delayed.

We are compelled owing to sickness among our employees and a breakage of our press to ask the subscribers of Blooded Stock to excuse the delay of this issue and the size of the paper.

The next issue will be the usual size. We trust to have the type in the June number set on our new Linotype machine. In explanation to our readers we would say that this great machine is operated like a type-writer and the type is made and casted into a solid line as fast the operator can run the keys. This will give us a face of new type each issue and the paper will have a cleaner and a neater appearance.

Variety In Feeding.

One of the commonest faults in feeding horses is the lack of variety of feed, says an exchange. Considering the number of different grains and feed stuffs it does seem that every team owner should provide for his animals a ration that would be perfectly acceptable to its system at all times. It is a fact, however, that not more than twenty per cent. feed what more may be termed a well balanced ration. The other 80 per cent. still cling to the old rations of corn and hay, or oats and hay, which practical experiments have long since proved to be expensive and wasteful.

When it comes to feeding your horses and mules just think of your own appetite, says a writer in the Horseman. Suppose you were performing hard, manual labor; how long would you be content to eat two articles of food—the same thing for every meal, day after day? It is safe to say you would tire of your ration in a very short time. It would be like "eating a quail a day for thirty days" and your digestion would soon get out of order.

A bad digestion and a poorly nourished body is always the result of improperly balanced food. When such a condition exists in either man or horse the best physical effort cannot be expected—it is impossible. No one or two articles of feed will supply to your horses all the elements of nutrition their system needs. If you want the best results feed a ration that contains all the elements of nutrition in properly balanced proportions.

Corn alone is not a well balanced grain for feeding—neither is oats or barley. Of the three grains oats is probably fed more extensively than corn or barley combined. Barley is rapidly gaining favor as feed, however, and when properly combined with the other grains makes an ideal ration.

We cannot emphasize too strongly the necessity for grinding the grain part of the ration. The horse owner who fails to do this loses 25 to 50 per cent. of its nutritive value.

The hard outer covering of the grain makes it difficult to digest, and a very large proportion passes through the stomach of the animal in an undigested condition. An examination of the feeds will show the whole grain and prove the truth of this statement.

When you feed a ground ration you prepare it for quick digestion. Your animals utilize it more readily and there is practically no waste. It should be remembered that the horse digests its food quickly, and whatever ration you feed should be prepared with a view to supplying the nutrition the horse needs.

Your horses will work better and keep in better condition on five or six quarts of ground mixed feed than they will on eight quarts of whole grain. Feed a variety of grains properly balanced, and have it well ground, and you will not only have better horses, but it will cost you less money to obtain this much desired result.

The average farmer, as distinguished from the dairyman and professional feeder, maintaining cattle as an incidental, requires not only milk, cream and butter in good supply for domestic consumption, but the cows which provide him with these products are also expected to raise a calf each year that can be profitably utilized in consuming the grass and "roughness" of the farm, so that the males will command a fair price as yearlings and two-year-olds for feeding purposes, and the heifers possess the requisite size and quality fitting them for retention in the breeding herd. Hence the necessity for a combined beef-and-milk producing breed for general farm purposes.—Alvin H. Sanders.

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Can You Answer these Questions.

Where did Alfalfa come from? What soil is best suited to Alfalfa? What are the advantages of growing life? How is it best harvested, cured and fed? What kind of grain should be fed with Alfalfa? How does it enrich the soil? How should Alfalfa be sown? What is the best method of selecting seed corn? How should it be stored? How can you improve the stand and increase the production of corn per acre? What is the best method of testing seed corn? What is a Germination Box? How is corn best prepared for the planter? What is necessary to get rid of the barren stalks? What are the best methods of cultivating corn? How can the wheat yield per acre be increased? What constitutes a good seed bed? Should clover be plowed under for wheat? Is corn stubble a good place for sowing wheat? How should wheat be sown in order to produce the best results? How should wheat be fertilized? Why does your soil run down? What are the leading elements of fertility? How can you secure them and keep them in the soil? How much fertility does each crop take from the soil? What is the actual value of farm manure? How should it be applied to produce best results? Will grain crops make good hay? What is the best method of seeding hay? Is the modern gasoline engine a good power for the farm? What is the best size gasoline engine to buy? What is a four cycle engine? What does it cost to operate a gasoline engine? Is ensilage the best and cheaper feed for dairy cows? What is summer soiling? What are the correct proportions of lean and fat producing materials in a dairy ration? How much milk and how much butter should a good cow produce? What kind of separator should the cow owner buy? What is skim milk worth as food for stock? How much wheat should an acre produce? Is wheat good in the farm crop rotation? Does any crop leave a poison in the soil? Can the wheat yield be increased by seed selection and breeding?

Every one of these questions and a thousand others of interest and value to every farmer are answered in "Farm Science." It is a splendid volume of 128 pages, profusely and beautifully illustrated and containing eight chapters specially prepared by the highest authorities on the several subjects. "Alfalfa Culture in America," by Jos. E. Wing, Expert Agriculturist of Mechanicsburg, O. "Modern Corn Culture," by Prof. P. G. Holden, Iowa Agricultural College, Ames, Iowa. "Best Methods in Seeding," by Waldo F. Brown, Farm Specialist of Oxford, O. "Increased Fertility," by Prof. Cyril G. Hopkins, Illinois College of Agriculture, Urbana, Ill. "Profitable Hay Making," by Prof. Thomas Shaw, late of Minnesota Experiment Station, St. Anthony Park, Minn. "Power on the Farm," by Prof. Fred R. Crane, Illinois College of Agriculture, Urbana, Ill. "Up-To-Date Dairying," by Prof. Clinton D. Smith, Director of Michigan Experiment Station, Agricultural College, Mich., and "Small Grain Growing," by Willet Hayes, Assistant Secretary of Agriculture, United States, Washington, D. C. Every author is a master in his line and every subject is treated exhaustively in all its ramifications.

The whole composes the most valuable and authoritative work ever issued along these lines. The copy before us has so impressed its worth upon us so that we urge every farmer reader of our paper to procure a copy at once. A book of such value cannot be secured at any price. However, any reader of this paper will receive a copy by enclosing 3 two-cent stamps and addressing "Farm Science," International Harvester Company of America, Chicago, Ill.

Kindly say to them that you saw this article in Blooded Stock.

Cream Separators in Nebraska

Within a few years Nebraska has come to be the greatest farm cream separator state in the Union. According to a recent census of the Nebraska State Experiment Station nearly 35,000 separators are in use today among Nebraska farmers. Without doubt this is a greater number of machines by a large majority than can be found anywhere else in a territory of this size. This universal use of the cream separator in Nebraska speaks volumes for it as a money making machine for the farmer. More and more each year is the farm separator becoming a big factor in the prosperity of the country. Through its introduction in many instances large territories throughout the middle-west have been converted from practically barren wastes into prosperous farming lands. Thousands of farmers living in the corn and wheat belts who were formerly engaged in raising grain and general farming are today making a specialty of dairying simply because the farm cream separator has made dairying a great deal more profitable than general farming. From Maine to California a great wave of reform in dairying and farming methods is sweeping over the country, and the cream separator is back of it all. Cow owners are everywhere awakening to the fact that a good cream separator is as necessary an article on the farm as a plow. According to present indications more farm cream separators will be sold in 1906 than ever have been in any year up to the present time.

In this connection, as an item of interest to all, the Nebraska Experiment Station authorities are quoted as estimating that from 85 per cent to 90 per cent of the nearly 35,000 separators in use in Nebraska are the famous DE LAVAL machines. These well known separators are universally used in every part of the world, and in view of the exceptional efficiency and the general satisfaction they give the user it is not surprising to find that over 85 per cent of the separators in use in Nebraska are of DE LAVAL, make A handsomely illustrated catalogue of the DE LAVAL machines and any desired information can be had for the asking by addressing The De Laval Separator Co., 74 Cortlandt Street, New York City, or any one of the Company's numerous branches.

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order, in these days, to give profit. This is not essential in the dairy cow, but certainly is for beef production. It is essential that the horse which is to show great speed must possess entirely different characteristics to those just mentioned; great breathing power as well as strength of muscle and bone; and so on as to other animals.

Suppose, then, it is desired that we should embark in the business of breeding; how are we to proceed and what are the principles which govern? (In discussing this matter further, I shall use the term herd alone as covering also flock and stud.) The herd consists of two parts, the females, and the male with which they are to be mated. In its commencement, it is well that the proprietor should have a definite idea of what he wants and make his selection of the females first, so that in the beginning the herd may show some degree of uniformity. This is especially important where only one male is needed. Then the male may be selected with a view of improvement, and considering the needs or weakness of the females. When the herd is sufficiently large so that several males are required, a greater opportunity is afforded for complete success. It is said that the male is half the herd. I would go further and say that, if he is of the right sort, he is frequently far more than half the herd, and his selection becomes of the greatest importance, because in this there will frequently lie success or failure.

Suppose you have decided what is needed in conformation in your sire, and you are fortunate to find him, will he certainly fulfill your expectations? He may prove a complete failure, because if he does not, when mated with your females, either improve them or reproduce himself. What is the matter? I cannot certainly answer. But I venture to assert it will most frequently be found in the lack of one or both of two characteristics. First, a lack of strength in blood lineage, or, second, a weakness in impressive character, which precludes the possibility of accurate reproduction. In order to discover the character of the blood lineage it becomes necessary to examine the breeding. This can only be ascertained by a study of the pedigree. Here the young beginner meets another difficulty. The pedigree conveys to him no information. There are some who would improve it by extending it so as to show a more complete lineage. Still it impresses nothing which gives complete information as to the power of the animal to transmit his own excellence. If it is to be of any value, there must accompany the pedigree a statement of the history of the individual animals mentioned to it. An extended pedigree will not furnish this, and to him who is well informed, it is not needed. To a man well versed in modern Shorthorns, the name of "Heir of Englishman" or "Champion of England," or his son, "Lord Lancaster" or "Perfection," "Scottish Archer," and others is sufficient. The line of breeding as well as the individual characteristics are at once before the mind, aiding in forming a correct judgment. If these ancestors are known to carry the same useful qualities, then it may be taken for granted that the animal being considered will have a much better chance of prepotency than if a diversity of qualities is seen to exist in the ancestry.

But the pedigree is not alone sufficient, the individual character of the animal must be under inspection also.

All of us have seen animals carrying a pedigree which could not be questioned, and yet the results from their use were entirely disappointing. It is evident that the individual quality must first be considered, and if these are satisfactory, then the pedigree may be studied with a view of ascertaining the probable prepotency of the animal as a sire. What I am now seeking to impress on you is that, both in individual character and pedigree, the animal should please you. You will then have a double reason for his use. Yet it is true that occasionally an animal inferior in quality, but tracing to a splendid ancestry, will give greater success than another with less intensity of blood, but much superior in appearance.

I presume that "Champion of England" was the most prepotent bull among "Scotch Shorthorns" in recent years. He was well bred, but he was not intensely bred. His appearance to the practiced eye of his owner indicated

ed from the beginning his value in this respect. His sons for many years were selected in the same way; then his grandsons; until the blood of every animal in the herd possessed great power to reproduce a similar type.

Some one will want to know what are the marks of such animals? Can he be always distinguished from his inferior mate? I believe it is impossible to fully and completely describe him. He should be looked at all at once, and

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BLOODED STOCK

not merely point by point, so as to balance the whole animal; defect against strength and strength against weakness in the different parts. There is a kind of intuition developed by experience and observation, which aid in right conclusions, but which cannot well be described. It is not doubt true that a sire cannot be properly selected unless a knowledge already exists of the females with which he will be mated; and it is quite possible that two men standing at the ring side may purchase two animals quite different in special characteristics, and yet both be abundantly satisfied.

In a general way, a female should be feminine in character, while the male should be entirely the opposite. He should not be coarse, although he may be large. Experience proves that the very worst results are seen from the service of a large, coarse animal. He should be straight in his lines with compactness of body; fairly strong in his limbs, but of good quality. He should have a brave, gentlemanly bearing, with clear evidences of intelligence and docility as indicated by the width of forehead, and a short, rather than a long face; a bright, keen eye; a neck not too long and well joined to the body, and a good width of chest. It is impossible to fully describe a strongly prepotent animal; he needs to be seen, when the expert at once is attracted; and the learner can only in that way really begin to be sized with a knowledge of the essential points of a prepotent sire. If we are to perfect these living animals, it can only be by intelligent action and not a chance conclusion. Our best men and our college professors should study and discuss the breeder's problems, so that here and there shall be found young men who, receiving a right start in this great field, shall develop that innate intuition which is hard to describe but which seems essential to success.

There is no good reason why there should not be developed American breeds of live stock, suited to the climatic conditions in which they are placed, and producing results suitable to supply the needs of our own people. In this connection, let me say how pleased I was to learn that, under the assistance of your national government an effort is to be made at the Agricultural Station in Colorado to establish an American breed of carriage horses. It may not reach immediate success, but it should be followed with intelligent persistence, as the proper result, when reached, will be a great blessing to all the people.

A great many problems not mentioned here will inevitably face the breeder.

er. A red sire and a rich roan female produce, when mated, a white calf, or a well bred pair with beautiful muzzels present you with a black-nosed calf. How does it come? Who can answer it? Yet I have a firm conviction that both are controlled by some (to us) unknown law. I feel sure that with continuous observation and experience under differing conditions and by different men, and with frequent discussions of such questions, the truth will some day be found.

Again there is the difficulty in determining what really exists under the skin. Is it mere tallow or rich juicy flesh? A practiced hand may discover it for you but the young beginner is lost, and too frequently those who are older are in the same predicament. I remember on one occasion asking the late Mr. Cruickshank whether he could distinguish flesh from fat. His answer was characteristic: "I can aye tell in my own beats, but I dinna ken whether I could or no in others." Many cattle look plump when fully grown, but it is a filling up of fatty tissues and not flesh, and the killing is in such a case very disappointing.

There is in this business of breeding an open field and a abundant scope for our wisest and best men. The way in many places has never yet been trodden. In following it, let us always remember that we seek to produce an animal of commercial value. An animal which will greatly add to the comfort, happiness and success of our people. (Continued on page 8)

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The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FILING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE-WILLIAMS CO., Cleveland, O.

Income from Ayrshire Cows

The value of a dairy breed is the net profit received above the cost of food and care given, and in order to obtain results of actual business I sent requests to the leading breeders of Ayrshires to give me the yearly returns from their Ayrshires cows, with cost of keeping. Some of the returns are of no especial value as the herds are not all Ayrshires, but I have given below the results of such as are indicative of the breed, and have withheld owner's name, giving a number instead.

C. M. Winslow Secretary,

Herd No. 1,15 cows.	
Milk sold,	\$1912.33
Milk and butter used in family,	175.00
Bull service fees,	15.00
Stock sold,	1293.10
	\$3395.33
Cost of feeding,	\$2613.00
Net profit,	\$782.33
Net profit per cow,	52.10
Herd No. 2,35 Cows For Two Years.	
1904-5	
Milk sold in 1905 @ .05 per qt.	5173.07
43 head sstock sold in 1905,	4457.00
	\$13959.07
Cost of feeding 35 cows @	
65.00 each for two years,	\$4550.00
Wages & board of two	
attendants for two years,	1680.00
Cost of feeding 53 head of	
young stock until sold @	
\$25.00 each,	1325.50
	\$7555.00
Net profit,	\$5404.00
Net annual profit per cow,	\$77.20
Herd No. 3,21 cows.	
Milk sold,	\$2254.00
Cream sold,	625.00
Stock sold,	1450.00
	\$4339.00
Cost of keeping cows @	
\$55.00 per head,	\$1155.00
Cost of keeping young cattle,	575.00
Cost of selling milk and care	
of cattle,	\$81.00
	\$2611.00
Profit,	\$1718.00
Profit, per cow,	\$81.80
Herd No. 4, 5 cows.	
Milk sold,	\$597.10
Stock sold,	100.00
	\$697.10
Cost of keeping,	\$267.54
Net profit,	\$329.56
Net profit per cow,	\$65.91
Herd No. 5,27 Cows And 5 Heifers.	

BLOODED STOCK

EVERY DAIRYMAN NEEDS THE Pilling Tuberculin Test

The greatest scourge of the dairy herd is tuberculosis, one affected cow will surely contaminate the whole herd.

Are your cows affected? Sure and easy detection by the Pilling Tuberculin Test.

Easy to use. You can do it. Absolutely no danger using the Pilling test; does not interfere with flow of milk or health of cow. Price with full directions, complete outfit serum for 10 cows, \$5.00 and \$1.25 for each additional 10 cows. No experience necessary. Illustrated Booklet Free.

GEO. P. PILLING & SON No. 2224 Arch St. PHILADELPHIA, Pa.

Milk sent to cheese factory, no account made of new milk fed to calves. Received from Factory for milk, \$1608.07
Stock sold, 1160.00

2768.07

Calling the five heifers equal to three cows would make an average yield, above what was used to raised calves, 6250 lbs. of milk per cow and a gross income per cow of \$92.27. As no return was made of expenses I am unable to give the net income.

ZENOLEUM VETERINARY ADVISER FREE.

A copy of this interesting and well-printed booklet, containing sixty-four pages of valuable advice, prepared by the leading veterinarians in the world for live stock owners and printed at a great expense by the Zenner Disinfectant Company, 40 Lafayette Ave., Detroit, Mich., will be sent to you upon request, absolutely free of all cost. This booklet is intensely interesting and you should have a copy. Do not wait a minute. Write for it now.

EVERGREEN FARM Berkshires, Glits bred. Spring pigs. Herd headed by Baron Longfellow 8th, 8589, half brother to the World's Junior Champion.
GEO. EDDY, Malone, N. Y.

THE DUROC - JERSEY IS AT THE TOP

and there to stay. Write us and we will give you the facts that will convince you. We have the blood of Orion, Ohio Chief (recently sold for \$2000.00), Sensation, Sure Winner, Topnotcher, Kant-Be-Heat, Protection, Longfellow, Washington King, Go-Forward, Fayette Chief and High Chief, besides a string of other leading Western Winning Strains, the very cream of Duroc-Jersey Breeding. Our prices are low and the quality is high. We can save you money. Write at once and we will give you some Duroc Facts.

LESLIE D. KLINE, - - VAUCLUSE, VA.

150 Choice Chester White Pigs

Now on the farm for sale

Our 20 years experience aids us more and more in securing the best to offer you. We sell largely to old customers, who have learned by past experience that they can get high quality and just what they want. Can't here describe what I have but write for our large illustrated catalogue, giving breeding of herd, which you will see is the best.

JAMES FISHER, Eastman, Wis.

CHESTER WHITES

Jerry S. 13167 at head of herd, sired more prize winners at Iowa State Fair than any other hog making an exhibit. Guaranteed satisfaction and it is satisfaction that satisfies. Try me.

J. H. MAHANNAH, North English, Iowa

CHESTER WHITE BREEDERS

I have 5 service boars, 6 sows ready to breed and 30 spring pigs, as fine as I ever owned and the most prolific. Write me.

LEWIS BAKER, Christiana, Pa.

SPRING PIGS CHESTER WHITES



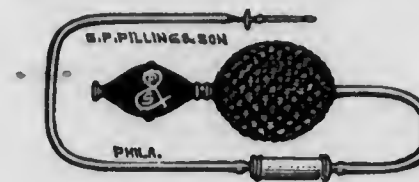
Bred right, Fed right, Priced right, Come and see them, as good as any herd in Penna. Can please you.

J. H. YARNALL, Kelton, Pa.

BLOODED STOCK

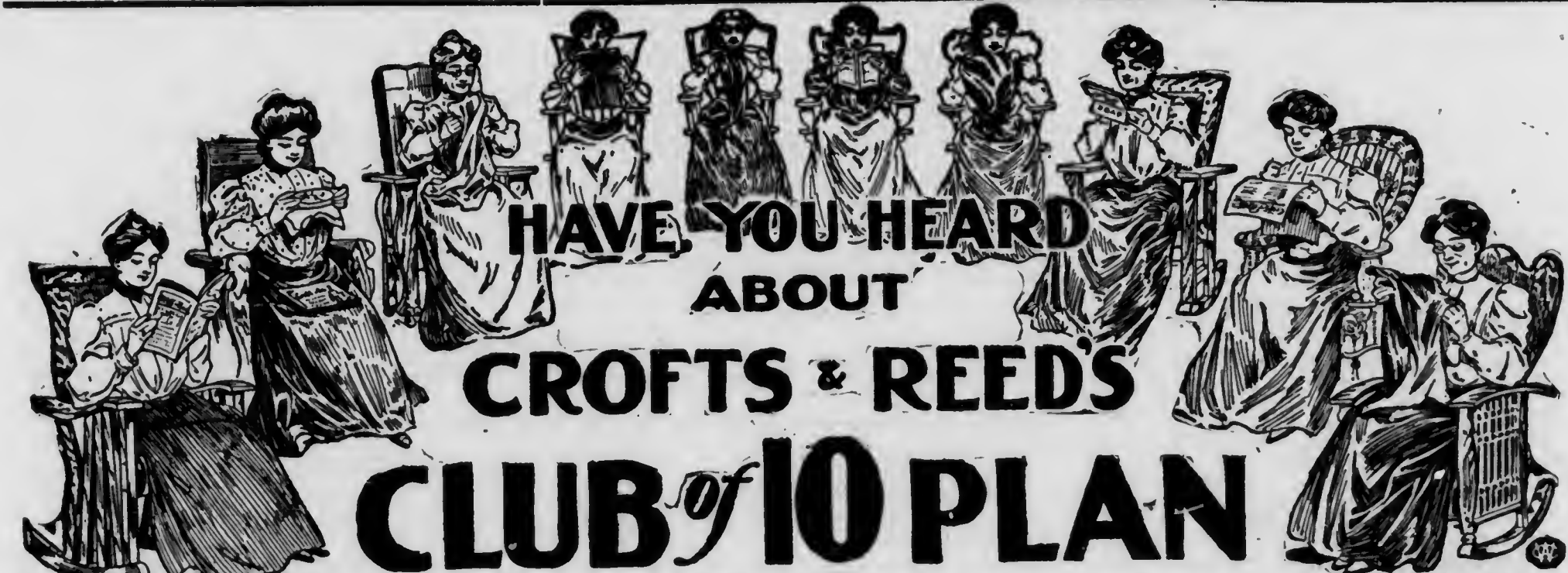
The cure of Milk Fever by Air Treatment has past the experimental stage and is now considered a positive cure. The Agricultural Department of Washington is very slow to recommend a treatment until they are quite sure of it's success and after they had made very thorough experiments they issued a pamphlet giving full information of the Air Treatment. By actual count of 100 cases treated 97 recovered. This is certainly a remarkable record. Next to the Government report we think the

statement of Prof. Oscar Erf, who had charge of the Dairy demonstration at the World's Fair, very remarkable when he spoke the following:- "I real-



ly think that it is a grand thing for Milk Fever. When in charge of the

dairy demonstration test at the World's Fair we had twenty-four cases of Milk Fever with the cows on exhibit there, and in every case this treatment cured the animals except one, and in this case other complications set in." We recommend our readers to write G. P. Pilling & Son of Philadelphia, Pa., asking them for their Milk Fever pamphlet as it describes the entire process. This firm for nearly 100 years has been manufacturing veterinary instruments. They make the very best grade of goods.



For Farmers' Wives

Here is an easy way for farmers' wives to get beautiful, useful, up-to-date home furnishings such as shown herewith—without any cost. We call it our "Club of Ten Plan" which means that by getting nine of your neighbors to join you in forming a "club of ten" to buy the household necessities you use and need every day, such as teas, coffees, soaps, baking powders, flavoring extracts, spices, in fact nearly all your groceries, direct from us—the manufacturers—each member can get these

BEAUTIFUL PREMIUMS WITHOUT COST

Our prices for such groceries are no more, than you are now paying your storekeeper, and in many instances less, while the quality we guarantee equal to any goods sold for same money. In fact, we offer to send them (also the premium) and let you use what you wish for 30 days. If they are not satisfactory you can return them at our expense and your money will be refunded in full. Send for particulars on our Club offer. Thousands are buying from us in this way and furnishing their homes without cost.

If you do not want the premiums ask us about our "factory to family" plan by which you can buy these same high-grade household supplies at half price. It is a plan that

Saves You \$10.00

every few weeks. For example, we sell a Pure Cream Tartar Baking Powder which costs you 25c at dealers for 12c and guarantee it equal to any sold at twice our price. Soap which you pay 5c a cake for we sell at 2c, and so all through our list of about 140 different articles. You can save one-half on nearly everything you buy.

Send For These 2 Books

they explain all our money-saving plans; show pictures of both goods and premiums and prove the folly of paying double our prices for things you must buy nearly every day. One of these books tells "How the Farmer's Wife can Save \$10.00" in a few weeks—the other "How she can Furnish Her Home without Cost." They are free for the asking. Send for them today and begin to save by our direct buying way. It pays.

CROFTS & REED, 815 W. KINZIE STREET, CHICAGO, ILLINOIS



Given with \$10 Order



Given with \$10 Order



Given with \$10 Order



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Given with \$10 Order

Breeding as a Business.

ple. It is not, therefore, what you or I may like, or for which another may have a fancy, but rather what the world needs and demands at our hands. Our minds must not be filled with fads or mere notions without reason. We ought to throw aside all prejudice brought about either by education or historical reminiscences, and seize at once the real object aimed at. If you are breeding for milk, then let milk always be present, or discard your animal at once. Don't, beg of you, listen to the argument, so often thrust upon you—"Just look at the pedigree!" Remember you cannot draw milk from a pedigree, no matter how perfect or what its length may be. And if you insert the name of your milkless cow in the continuation of such a pedigree, and her history is written with it, as it should be, you are surely fastening on it that which destroys its value, for opposite this milkless cow there can be placed as fully deceptive only two letters, "N. G." (no good).

If you are seeking to produce a road horse, then you will keep in mind that which is under the horse—his feet and limbs. But that is not enough; you will want to know whether he can properly use them. They are not intended merely to be looked at, but to take you from place to place without too much wear and tear, and in a reasonable time. If the road horse cannot do this, then, I fear, however handsome he may be, I shall be obliged to label him also, "N. G."

If you are producing beef or bacon, you must secure the quality desired and demanded by the commerce of the world. But that is not all; you will be bound to consider the cost. The value of the animal is commercial; can it be produced at a profit? Does it grow fast enough to give quick returns? If not, you ought to secure another; the great value of the pedigree of such an animal is not warranted by the results reaped.

I might multiply instances as illustrating my point, but these are sufficient. This is a practical age and the successful breeder must be practical also. The main issue must be kept always to the front. In conclusion, let me say that he who succeeds in improving any branch of our live stock industry, will not only give pleasure and satisfaction to his fellow men of whatever calling, but deserves that his name shall be held in esteem as one of the great of the death.

Vehicles & Harness

Buying a vehicle or harness like many other important matters of business, is generally slighted at the time when it should receive the most attention.

A man makes up his mind to the purchase and then postpones all thought of quality and style until the day of buying.

It is not too much to say that there is no business in life worthy of more careful consideration than the selection of a vehicle or harness. Every day stories of fatal accidents, runaways due to defective construction of these things prove this. The lives of loved ones depend on the judgment exercised at the right time and the right time is before

BLOODED STOCK

"Easy to Use" PILLING CATTLE REMEDIES

Pilling Milk Fever Outfit—For Air Treatment as recommended by U. S. Department of Agriculture—sent Prepaid \$3.00—full directions.
Pilling Abortion Remedy—Used in connection with Pilling Breeding Powder. Now is the time to use it—price \$1.00, or large size (four times as much) \$2.50, Prepaid.

Make Cows Breed with Pilling Breeding Powder
Failure to breed, failure to come in season regularly, failure to clean. Full directions \$1.00, or large size (four times as much) \$2.50 Prepaid.

Pilling Injector Tube for administering Breeding Powder, \$.75 Prepaid.
Pilling Calf Scour—Good for calf or foal—a most successful remedy. Full directions \$1.00, or large size (four times as much) \$2.50 Prepaid.

Our Veterinary Staff, composed of the best cattle specialists in this country, will answer cattle questions free of charge to our customers; veterinary advice to others, \$1.00.

SPECIAL COMBINATION OFFER \$9.00.
Pilling Milk Fever Outfit.....\$ 3.00
Large Package Calf Scour Remedy..... 2.50
" Abortion Remedy..... 2.50
" Breeding Powder..... 2.50
Injection Tube for Breeding Powder..... .75
Value.....\$11.25
All sent Prepaid Express for.....\$9

GEO. P. PILLING & SON, Cattle Specialists
Established 1814. No. 2224 Arch Street, PHILADELPHIA, PA.

the purchase.

The Marvin Smith Company of Chicago is prepared to meet just such careful critical examination of vehicles and harness, as is here recommended.

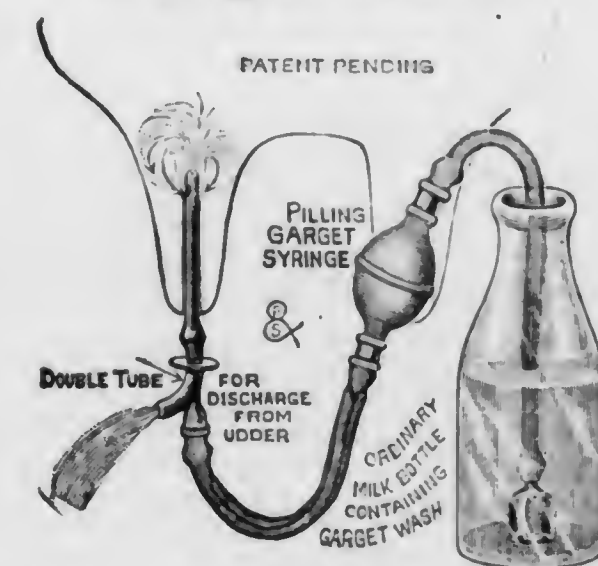
The Marvin Smith Company's offerings in these lines are built to the ideal of substantiality on the most artistic lines.

One of its most popular vehicles is its top buggy, the Chicago Special constructed to stand every test, and selling at \$50.00.

This remarkably low price is one of the advantages the company is enabled to give its patrons an account of the large output of its own big factory in Rushville, Ind., now running at its fullest capacity.

Write to the Marvin Smith Company, 38-44 So. Canal St., Chicago, for its handsome and complete Vehicle and Harness catalogue. It gives you opportunity to go over the matter thoroughly before buying.

Garget Outfit



Perhaps few conditions have caused more loss and annoyance to dairymen than inflammation of the udder, commonly called Garget. Its treatment has been far from satisfactory, until the invention of the Pilling Garget Outfit. The Pilling Garget Outfit is made on scientific principles different from anything else. It is very "Easy to Use," and every dairymen should have one on hand in case of an emergency. Write to George P. Pilling & Son, 2224 Arch Street, Philadelphia, Pa., asking them for descriptive pamphlet. Do not wait until it is too late.

Debility, Poor Condition and Loss of Appetite

are a few of the many ailments from which an animal is suffering, and at the approach of Spring they also suffer from weakness and disordered digestion. A condition which is opportune for the lodgement of germs oftentimes resulting in various diseases inflicting the animals for use.

Now is the time to use Foutz's Horse and Cattle Powder to condition your stock and strengthen their constitution to withstand the heat of summer and the extra drain of vitality required during that time. It is the oldest, best known and most reliable animal tonic and conditioner on the American Market where it has been used continuously for more than 50 years. For sale at all dealers or from us at the following rates:

Package 25c; 5 Packages, \$1.00;
12 Packages, \$2.00.

BEWARE OF IMITATIONS and take no substitute, otherwise you are the loser. Send to us for our booklet "Proteology" and any other information you may desire.

The David E. Foutz Co.,
Baltimore, Md.

BREED JERSEY REDS
They are good foragers and rapid growers. Easily fattened at any age and produce meat of finest quality. There's money in pure-bred Jersey Red Swine. Write for booklet.
Arthur J. Collins, Box A, Moorestown, N. J.

N. P. KERSHNER & Co., Ansonia, O.
OAKVIEW HERD
—OF—
POLAND-CHINAS
I have the best Poland- and Chinas now for sale that I ever owned. 20 Head of March and April Sows sired by "Ohio Sunshine," bred to farrow in April. They are large and strong boned. Choice Aug. and Sept. pigs of both sexes. Spring boars all sold. Write for particulars.
W. H. CRESWELL, R. 3, Cedarville, O.

NOW IS THE TIME! GET A GOOD READY FOR HARVEST

You have heard of the cow that gives a big pail of milk and then at the last moment kicks over the bucket and spoils it all? What about the man who grows a good crop of grain, and then half harvests it? You wouldn't waste half your crop.

Of course not.

But why waste any of it?

Why not get it all?

As the boy says, "Every little bit helps."

Every little bit wasted, counts—and counts against you and your profits.

As a sensible farmer, you can't afford to approach harvest time without making sure that you are ready for it the very minute your grain is ready.

You cannot afford to depend upon a harvesting machine that wastes even a small part of your grain.

You cannot afford to spend your money for a "May-be-so" harvesting machine—one that may or may not do your work for you in a satisfactory manner. You cannot afford to start harvesting with a machine that may break down at your busiest moment.

You cannot afford to start harvesting with a machine that will half kill your horses before your grain is cut.

You cannot afford to start harvesting with a machine that is likely to cause delay in your work.

You cannot afford to take chances.

You want to be sure, and now is the time to make sure.

Go To The Nearest Dealer

Examine for yourself the line of standard harvesting and haying machines for 1906. Get a catalogue and study their construction. You will find in

Champion, Deering, McCormick, Milwaukee, Osborne, Plano

lines harvesting and haying machines that meet your every expectation and fill your every requirement.

They are right in principle and design, for they are the product of a half century's inventive genius. Every improvement that the best mechanical experts of the world have been able to discover or devise in 50 years is embodied in their construction. That's why they are so convenient to handle—why they do their work so well. That explains too why they are so easy on man and horse—and why they waste so little grain.

They are right in materials, for their manufacturers by co-operation are able to produce and select the best materials. By co-operation they are able to own, control and operate their own lumber camps, their own iron mines, their own coke furnaces, their own steel mills and other sources of raw materials, thus being sure at all times to have materials for making their machines of the highest quality.

They are right in workmanship, because the demand for these standard machines is so great that immense factories are necessary for their production, and their manufacturers are able to equip the factories with the best facilities and the most expert workmen.

They are right in reputation, for they have by their own merit survived years of strenuous competition. They gained their popularity solely on their merits. They retain their popularity in the same way. They are used all over the world solely because they have met the demands and filled the requirements of grain-growers and grass-growers.

Is not that just the machine you need for your harvest for 1906?

You certainly want a machine with a reputation behind it—you cannot afford to run risks. Where can you find a machine of any kind that has a record of more years of successful, satisfactory work than you know these machines to have?

You want a harvesting machine made of the right materials. No machine can have better materials than have these machines—few manufacturers are fortunate enough to secure so good.

You want a machine that is built on the right plan—that "works right"—that is constructed on the right principle. The approval of the grain growers of the whole world—the successful standing of the test of years—the ever-increasing popularity of these machines—these things tell the story of how they are built and how they work.

In reputation, in workmanship, in materials, in design—in all that goes to make good harvesting and haying machines, they are right. They will meet your every requirement.

Can you afford then to go into the harvest with a machine that may fail you?

Can you afford to run the risk of a "break down" at a critical stage of your harvesting?

Can you afford to waste a part—even a small part—of your grain or grass?

Don't do it but go to the international dealer, secure a catalog, inspect these machines, and get a good ready for harvest.

If you don't know an international dealer—write to us for name and address of one nearest you

INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U. S. A.

(INCORPORATED)

International Line—Binders, Reapers, Headers, Header-Binders, Corn Binders, Corn Shocks, Corn Pickers, Huskers and Shredders, Corn Shellers, Mowers, Hay Tedders, Hay Rakes, Hay Loaders, Sweep Rakes, Hay Stackers, Hay Balers, Knife Grinders, Gasoline Engines, Pumping Jacks, Manure Spreaders, Weber Wagons, Columbus Wagons, Bettendorf Wagons, Binder Twine.



Care and Management of Swine

Paper by S. A. Moore, Fargo, N. D., before the Tri-State Grain and Stock Growers' Convention.

It is not the object of this paper to spring any new-fangled ideas or expensive methods of taking care of the pigs, but to remind you of some of the things you possibly all know but neglected to do.

The hog industry in North Dakota is yearly on the increase and there are many reasons for believing it will continue so. Admitting that North Dakota is not, as yet, a strictly corn country, yet we do not consider the lack of corn any great drawback to the raising of hogs. I believe that the sows will raise larger and better litters; that we will have a better-boned and better constituted hog when corn is the minor rather than the major portion of their feed. Speltz, oats, barley, clover and roots can be grown as cleanly and easily in this state as in any other.

To be successful in raising pigs, one should be on as intimate terms with his hogs as with his horses and cattle. While there is nothing meaner than a mean hog, yet there is no other of the domestic animals that will respond more freely to good treatment than he will. The man who thinks, "darn a hog anyhow," and that any old place good enough for them, had better let the other fellow raise the hogs.

We will presume that this is the breeding season and that you have selected your brood sows, and that they are in a good, healthy, vigorous condition. It is a mistaken idea that the sows must be thin to be successful breeders. They should be in medium flesh. Do not allow the boar to run with the sows, especially a young boar, but have a pen and good yard for him and feed him a little extra during the breeding season. Turn the sow in with the boar at the proper time. Mark down the date of service. After breeding the sows gradually increase their feed, as from then until weaning time there is an extra strain on their system. I feed slop once a day made of ground oats or speltz and some shorts mixed in and once a week put in a handful of oil meal and a very little salt to each sow's feed. Have the feed troughs some distance from the sleeping quarters, so as to give them exercise in going to and from. Especially is this necessary during cold weather. A shed made of poles and covered with straw makes a good place for them to sleep in during winter, as it does not steam up and if kept well bedded makes a more comfortable place than an expensive house would. In addition to the slop, I give the sows a feed of dry grain (mostly oats) once a day, and see that they have as much water as they will drink. As farrowing time draws near, give them a little attention. See that their bowels are in good condition. If necessary, add a little more oil meal to the slop, and also see that their bedding is kept thoroughly dry. Avoid having them drag themselves over a high door-sill or any other obstruction, in going back and forth from the pen. About a week or ten days before farrowing time (which will be from 112 to 115 days from date of service) put each sow in a pen by herself. This pen should be about eight feet square, with a window and door on the south side. I prefer a board floor in a farrowing pen. Around the inside of the pen,

BLOODED STOCK

about eight or ten inches from the floor, spike on edgewise, some pieces of two by six or two by eight. This makes a sort of runway for the little pigs, and there is less danger of the sow lying on them. If the sows are due to farrow very early in the spring or during cold weather, it will pay you to be around when the little fellows make their appearance. You can usually tell, within a few hours, when to expect them. The sow will get restless and the teats will fill up with milk. If very cold or there is danger of the little fellows getting chilled, I have a tub or half of a barrel with some good dry chaff in the bottom of it and in the center of this place a jug filled with hot water. Cover the jug with a sack.

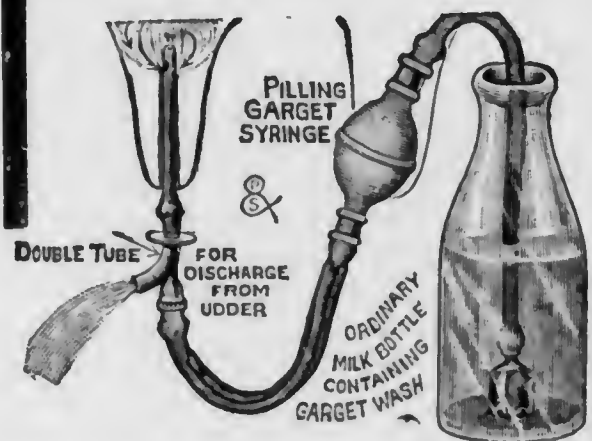
As the pigs arrive put them in the tub or barrel and they will huddle up around the jug and there is no danger of their getting chilled. After the sow is through farrowing and ready to

nurse them, you may take them out and leave them with her.

For the twenty-four hours after farrowing I do not give the sow anything but a drink of water with the chill taken off it. Then commence feeding gradually and within a week have her on full feed again, but at no time give her any more than she will eat up clean. There is more danger at this time in overfeeding than in not feeding enough. After farrowing, however, I feed the slop twice a day. I find that shorts and ground oats with a little oil meal mixed in makes the best feed for a sow nursing pigs.

When the pigs are two days old I take a pair of small nippers and nip off the small sharp teeth you will find they all have. When they are two or three weeks old they will want more room to run around. Have a small yard on the south side of the pen and when the weather is warm enough, let them have

PILLING GARGET OUTFIT



Sent Prepaid with full instructions on receipt of \$4.00. Includes 30 treatments.

EASY TO USE. SAFE. SURE.
GEO. P. PILLING & SON,
3224 Arch St., PHILADELPHIA, PA.

FOR SALE

4 ABERDEEN-ANGUS BULLS 4

They Have Size, Bone and Quality

A few fall boars, best of quality and as good Poland-Chinas as the country can produce. They are all sired by the famous Sunshine, 83243. They are strictly herd headers and will be sold for half what such pigs generally sell for. Write.

JOHN MEISSNER,

REINBECK, IOWA

Berkshires and Guernseys

ALDORO FARM ROSSTON. PA.

Offers a choice lot of young sows bred to farrow at about 12 months old at \$25.00 and \$30.00 each. These are out of royally bred stock and are genuine bargains. Also two young boars ready for service at \$20.00 each. We have a few choice Guernsey bulls old enough for service at \$35.00 to \$60.00 each.

BLOODED STOCK

that you have spent a little time and a little money in the selection of a good boar.

I shall just recapitulate this paper with a few don'ts: Don't inbreed, it does not pay. Don't cross breeds, or rather don't criss-cross. One cross may be all right and give good results, but two or more crosses are all wrong. Adopt one breed and stick to it. Don't neglect your sows at farrowing time. Don't have them farrowing around the straw stacks and then say you have no luck with pigs. Furnish a comfortable place for your pigs to sleep in during the winter months and supply them with plenty of clean, dry bedding. Don't shut them up in a small, filthy pen and then wonder why they will not do well. Don't neglect giving them plenty of fresh water at all times of the year.

Clean water, dry straw, sunshine and fresh air are not expensive, and while a hog cannot live on these alone, yet he will not thrive well without them.

Lousy Live Stock

Farm stock that becomes badly infested with lice during the winter months do not thrive as they should, and in the spring may show marked unthriftiness. This is especially true when stock are not well cared for and in young animals.

The sucking lice are more harmful than the biting varieties, as the former have mouth parts adapted to penetrating the skin and sucking the blood of the host. However, the symptoms may be as marked in sheep and other animals, that are badly infested with biting lice. In such cases the wool or coat become matted and detached, and the skin irritated and inflamed as a result of the animals rubbing, biting and scratching the parts.

Good care during the winter will prevent the lice from doing a great deal of harm, and the simpler remedies, such as mercurial and sulphur ointment rubbed back of the horns or ears and along the mane and back, and insect powder dusted into the coat may help to destroy them. A thorough treatment of the herd with dips or washes cannot be practiced during the winter months, unless the treated animals are prevented from catching cold. A favorable time to use this line of treatment is in the spring. A one or two per cent. water solution of a tar disinfectant should be used. A convenient way to apply the remedy in the larger animals is with a spray pump, and in sheep and hogs by dipping. Whatever method is used, the coat and skin must be thoroughly wet with the solution. Proper care should be taken in mixing the remedy, as there is danger of making it too strong and irritating the skin.

After treating the herd, the stables, sheds, or sleeping quarters should be sprayed with about a two per cent. water solution of the disinfectant, or whitewash may be used instead. This is necessary in order to prevent re-infesting the herd from the surroundings. If there is much litter around the yards and it cannot be gotten rid of, it is advisable to move the herd to other yards. Tar disinfectants in one or two per cent solutions do not destroy the eggs or nits, hence it is necessary to treat the animals again in ten days or two weeks.

Stockmen sometimes ask if the feed-

ing of sulphur to lousy animals will not drive away or destroy the lice. The feeding of small doses of sulphur will do no harm, neither will it help in getting rid of the lice, and it cannot be considered a remedy for this class of disorders when used this way. Sulphur is effective, however, when used externally, and the addition of four ounces to every gallon of the tar disinfectant solution used, greatly increase the effectiveness of the remedy.—R. A. Craig, Veterinarian at Purdue University Agricultural Experiment Station.

Are You Ready For Harvest?

There is a dignity about the International Harvester Company advertising we are running which is befitting the subject. "Mother Nature has done her part. The fields are ripe. Are you ready for the harvest?" That is the dignified way the great Harvester Company introduces to our readers its excellent machines, Champion, Deering, McCormick, Milwaukee, Osborne, and Plano, which aid in the harvesting of so large a part of the grain and hay raised in America.

Readiness for the harvest is all important. As the grain and grass are ripe, so are the machines ready and equal to the duty. Nobody questions the superiority of the International



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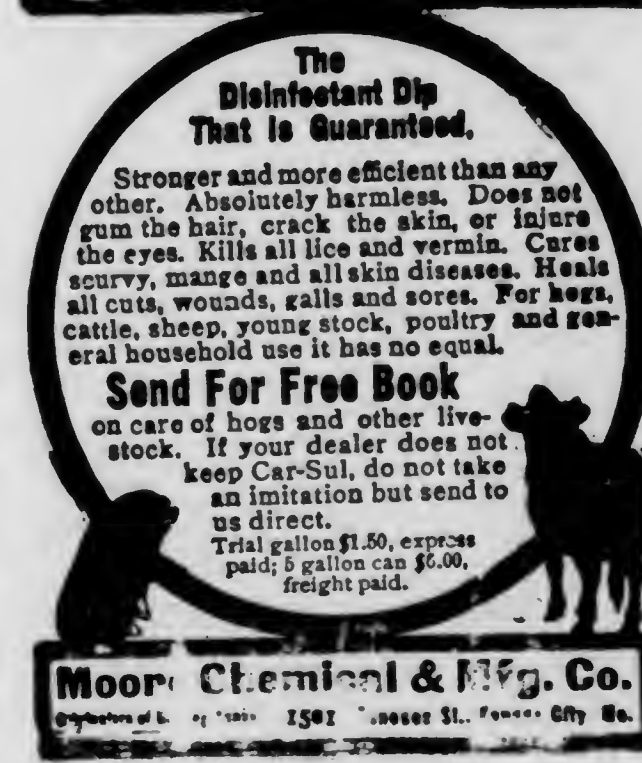
and skate ware with

Solderene

(Agents earn \$10 a day)

Simply heat around the hole or joint and rub on Solderene. Anybody can use it. For 10 cts. and name and address of your hardware dealer we will send stick postpaid. Solderene Co., Dept. 1, 53 State St., Boston

CAR-SUL



Moor Chemical & Mfg. Co.
1502 Kansas St., Kansas City, Mo.

The Place for Large Yorkshires In American Swine Husbandry

By J. J. FERGUSON

In this country we now have something like twenty recognized breeds or well defined types of swine, each supposed to possess certain peculiar or special characteristics fitting them in a superior degree for certain uses or rendering them especially adapted to thrive under special conditions. Multiplicity of breeds and types is due perhaps primarily to the whim or fancy of the breeder but is also largely dependent upon the wide variation in conditions of soil and climate over the country. In our wide extent of territory with diversified conditions of soil and climate resulting in a range of crop production, we naturally find a wide difference in the character and quality of the hogs produced in different sections. This is true to the extent that we may readily divide the hog producing territory into well defined areas, each presenting what is practically a distinct and characteristic type of swine. For example; the lard hog of the corn belt is the result of abundant supplies of feed rich in fat producing materials. Continued experience has demonstrated that the lard type hog, while undoubtedly the most profitable type for the corn belt, may not in all cases give the farmer of the Eastern or the Northwestern states the largest net returns. In the Northwestern states where the supply of feeds is of such character that they tend rather to the production of lean meat than of fat in excess, it is more difficult to develop the lard type of hog to the highest point of excellence. At the same time these feeds are such that they will produce a profitable type of hog admirably suited for certain markets where the heavy hog is no longer wanted.

In the states outside of the corn belt proper, and especially in those of the Northwest, where corn is produced only to a limited extent, wheat, peas and barley, all nitrogenous or muscle forming foods, may be grown abundantly, hence the farmers in these states may properly decide to meet the conditions already to hand and produce the type of hog which has been found to give best results under like conditions in older sections of the country.

The high degree of excellence in bacon production from Denmark, Great Britain and Canada where the supply of feed is quite similar to that in the Northwest, demonstrates the desirability of handling the type of swine which has given profitable results in those countries. In these same countries it would be a mistake for the farmers to introduce and persist in breeding the lard type hog since not only would it be impossible to maintain a high standard of the type under their conditions, but see that a class of bacon hogs fitted for the finest export trade may be produced, it would be a mistake financially.

Each of our large market centers has practically its own standard or type of market swine. Of late years the various types have gradually been narrowing down to one uniform type which will give best results, not only to the producer and packer but which is also most desirable for our modern markets. Until recently our domestic markets demanded heavier meats than those called for by the British consumer.

The British market has demanded lighter, leaner meats, finished at early weights. The heavy hams, shoulders and fat backs of the lard hog find slow sale in Great Britain. When we seek bacon hogs suitable for the production of export bacon sides, we must look outside of the corn belt for the type that is most desirable. While it is true that under favorable conditions, some desirable bacon hogs may be produced in the corn belt, we cannot reasonably expect this seeing that they have been bred persistently for widely different purposes. In the last ten years our home markets have undergone a decided and permanent change. The American consumer has learned that tender, juicy ham and bacon are among the most palatable and nutritious food stuffs available if produced from animals not over-loaded with fat. The most critical American trade is calling for practically the same grade of ham and bacon as is demanded by the British consumer. Without doubt the tendency will continue in this direction; consequently we turn to the bacon hog to fill the requirements. An ideal bacon hog must be smooth and even

throughout and with a smooth even covering. The back should have an even covering of fat running from three-fourths to one and one-fourth inches in thickness, evenly laid from the crest of the neck to the tail head and not thickening into a heavy patch behind the shoulders or over the loins. Given first-class bacon hogs, the packers, with their present perfect facilities for curing and handling the product and placing it upon the European markets, would, without doubt, soon command for the American farmers prices would compare favorably with those now paid for the finest English and Danish hogs.

As to the cost of producing bacon

KENDALL'S
SPAVIN CURE

Time tried. Stands every test. Spavin, Ringbone, Curb, Splint, Lameness, Swellings—all readily yield to the great horse remedy.

ALWAYS ON HAND.

Morris Plains, N. J., June 14, 05.

Dr. B. J. Kendall Co.,
Dear Sir:—Please send me your Horse Book. Kendall's Spavin Cure is the best I have ever used; I have used it for three years and always kept it on hand. Respectfully, W. E. Teets.

\$1 a bottle. Six bottles for \$5. Greatest known liniment for family use. All druggists sell it. Accept no substitute. Our great book, "A Treatise on the Horse," free from druggists or
Dr. B. J. Kendall Co., Enosburg Falls, Vt.

STONE HOUSE STOCK FARM. N. H. Hood, Adrian, Mich. BREEDER OF THE WORLD'S BEST O. I. C. SWINE and SHROPSHIRE SHEEP.

Stock for sale at all times of the most approved strains. Satisfaction guaranteed. I have a select herd of quality and shall be pleased to supply the wants of any breeder or farmer who appreciates the best obtainable. Write me your wants before buying. Come and see me when you can. Call at Dr. Gibson's livery; carriage at my expense from Adrian.

STRICTLY PRIME LOT OF GILTS AND BOARS

from the best of breeding. Nothing but tops shipped. These gilts and boars are nearly all sired by my Bold Baron and out of some very choice English and American bred sows that are known to be the best breeders. Write me and state what you want and I will please you. The Clover Leaf Herd of Berkshires are famous for their extremely good quality and individuality.

CLOVER LEAF FARM, STANLEY, N. Y. E. E. HALL, Proprietor.



SEND 3 PEDIGREES FOR RECORD AND \$1.00. Will Register any breed swine once at this rate to show you our way and Save Your Dollars, make lasting friends, patrons, members. Write us of your business fully. Save 40 per cent. in fees alone. We send you complete information free for asking. U. O. to know what others know. Memberships, all departments, only \$5.00. Lowest Fees. We will exchange memberships with any other Association at par value free. Now consolidate your business with us. Every breeder sending \$1.00 as above this month will also get this paper free to January 1, 1907. Be Prompt To-day. International Consolidated Record Association, Penn Yan, N. Y. Wear badge pin—\$1.50 per paid.

ABERDEEN-ANGUS CATTLE BUY A WINNER—A MARKET TOPPER

The Angus cattle have captured more firsts and championships at the great fat stock shows than all the other breeds together. Why? Because they require less feed, feed easier, carry a maximum of the high-priced meats and a minimum of the cheaper cuts and offal, and will invariably outsell cattle of other breeds. We have them for sale of the most popular breeding. Our prices are within the reach of all. We solicit your correspondence and invite you to come and see our stock.

Meissner Bros., - Reinbeck, Iowa.

AIR TREATMENT

PILLING MILK FEVER OUTFIT

The Pilling Milk Fever Outfit is made according to specifications furnished by the U. S. Department of Agriculture. Beware of imitations "just as good." Price, with full directions, prepaid, \$3.00. COMPETITION MILK FEVER OUTFIT. Like all other good things the "Pilling Milk Fever Outfit" has been imitated but not equalled. To satisfy a demand for a cheaper appliance for air treatment, we have invented the "LANDSOWNE MILK FEVER OUTFIT," working on the same principle; is cheaper in construction, but well made. Price, with full directions, prepaid, only \$2.25 each.

GEO. P. PILLING & SON, Established 1814. No. 2224 Arch St. PHILADELPHIA, PA.

hogs; while numerous experiments at Canadian Experiment Stations have shown that under their conditions, bacon hogs cost no more per pound to produce than hogs of the lard type, it is only fair to say that Canadian conditions are more favorable for bacon hogs than those in the American corn belt, but Minnesota and North Dakota having the same conditions as Canada; results will be the same, so the farmers outside of the corn belt, and especially in the Northwestern states, where nitrogenous feeds are abundant and cheap, can produce hogs at a cost which will compare favorably with the cost of heavy hogs in the middle Western states. We are satisfied it will pay hog raisers everywhere not producing pure bred animals, but hogs for market only to introduce some bacon type blood in their herds. It is a well known fact that where corn has been fed continuously for generations, swine have become deficient in bone and muscle and lacking in ability to yield a reasonably large proportion of edible, juicy, lean meat in their carcasses. In such cases, experiments already tried, have demonstrated conclusively that it will pay to use bacon type sires for one or two crosses. It was once thought that desirable firm, light bacon sides might be secured from undersized, unfinished lard hogs. This experiment was unsuccessful and the work has been discontinued. The most desirable cross, if a cross be desired, is with a Yorkshire boar and a Berkshire sow. The large improved Yorkshire has many qualities to recommend him as the ideal bacon type hog—first his color is the best; white hogs dress out cleaner and yield more attractive carcasses than hogs of other breeds. They are remarkably prolific, the writer having seen in his own experience numerous litters of sixteen to eighteen pigs with an average covering ten years of more than ten reared Berkshire dams are remarkably good mothers; hence we find the young pigs are started so well in life that at eight weeks old they should be heavier than pigs of other breeds. Some charge the Yorkshire breed with being slow in maturing, in view of the fact that a thrifty Yorkshire will take on weight until the age of four or five years, but compared with other breeds at the age of eight to ten months which is the most desirable age to fulfill the packers' demand for bacon products, I am satisfied that they cannot be surpassed for rapidity of growth and development.

As to their place in the United States; I do not recommend their general introduction over the country to the exclusion of present types, which in many cases are producing maximum results with great profits. In any section of the Northwest where the production of bacon hogs is already a well established and profitable business, the Yorkshire is strongly in demand and this demand will continue as the requirements for bacon type are constantly increasing.

The writer bred and handled large Yorkshires and their grades and crosses for ten years on his own farm and is thoroughly familiar with them from the farmer's point of view. Several years subsequently spent in careful study of our breeds of swine from the market standpoint in the world's greatest packing business is referred to merely to assure the American farmer that the opinions here expressed are founded on actual experience and fact.

Mr. Andrew Boss, Professor of Ani-

mal Husbandry at the Minnesota Agricultural Experiment Station endorses the Yorkshire breed in the following letter to Swift & Company, St. Paul, Minn.:

"I am glad to see that you are interested in inducing the farmers of the Northwest to grow better hogs. I have been an admirer of the Yorkshire breed ever since I learned their good qualities. They are adapted to general farm conditions, I think their prolificacy and good breeding qualities make them a very desirable farmer's hog. In our

(continued on page 16)

Don't Neglect Catarrh



CATARRH SPECIALIST SPROULE

Who Will Give Free Advice on Curing

Catarrh to All Who Ask It.

every year just because they neglected Catarrh. Cure Your Catarrh Now—do not let it run on another day. Write to me at once and let me give you really helpful and valuable

MEDICAL ADVICE FREE

on just how to cure Catarrh. It shall not cost you a cent, and it's bound to be of wonderful aid to you.

Let me show you what I'll do for you entirely without charge. For twenty-one years I've been studying and curing Catarrh. Now I offer you, without any expense whatever, free consultation and advice on curing your trouble—the benefit of my wide knowledge and beneficial discoveries.

Don't let this chance go by—accept my assistance today! It's promised in genuine sincerity and friendliness. People all over North America, who've already received my advice, gladly testify to what it has done for them. I'll cheerfully send you names and addresses of those who have sought my aid. Now they are cured of Catarrh, as they willingly bear witness.

Learn at once how Catarrh can be cured—thoroughly and successfully.

Simply answer my questions yes or no, write your name and address plainly on the dotted lines, cut out the free medical coupon and mail it to me without delay. Address Catarrh Specialist Sproule (Graduate in Medicine and Surgery, Dublin University, Ireland, formerly Surgeon British Royal Mail Naval Service) 385 Trade Building, Boston. Don't waste any time—delays are dangerous. Do it NOW.

CUT OUT THIS COUPON

It entitles readers of this paper to free medical advice on curing Catarrh

Is your throat raw?
Do you sneeze often?
Is your breath foul?
Are your eyes watery?
Do you take cold easily?
Is your nose stopped up?
Do you have a toothache?
Do you cough in the nose?
Are you worse in damp weather?
Do you blow your nose a good deal?
Does your mouth taste bad mornings?
Do you have a dull feeling in your head?
Do you have to clear your throat on rising?
Is there a tickling sensation in your throat?
Do you have a discharge from your nose?
Does the mucus drop in back of your throat?

Name

Address

VETERINARY DEPARTMENT.

C. D. SMEAD, V. S., Editor

Professional advice given free to all subscribers through this department of Blooded Stock. Always describe symptoms, age, etc., as accurately as possible. Whenever you want prompt personal advice by letter and not for publication enclose One Dollar (\$1.00) fee. To derive the greatest benefits from this department preserve regular files. Always send your full name, post office, county and state with each inquiry direct to Blooded Stock, Oxford, Pa.

The Wisconsin HERD of DUROC JERSEYS

Have for sale 100 registered pigs of February and March farrow. Are bred from the most noted and up to date strains of prize winning stock. Write me before you buy. It will pay you. Will ship pigs after May 1st.

W. H. REED, Whitewater, Wis.

MORGAN HORSES or JERSEY CATTLE

If interested send for Bayside Farm Sale

— List —

L. D. ELY, Rochester, N. Y.

REGISTERED HEREFORDS

Bull and Heifers at prices any farmer can afford to pay....

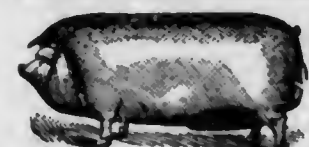
GEO. BISSELL, Ligonier, Pa.

OAKDALE FARM

Property H. A. DANIELS
Box 313 - Clio, Mich

Exceptional advantages to introduce our LINCOLN SHEEP CHESTER WHITES } to readers of SCOTCH COLLIES } this paper

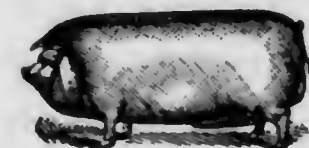
Write your wants immediately. Special offering Scotch Collies and Chester Whites now on hand.



Chester Whites

For years I have been selecting and breeding to build up a herd that would be uniform in shape, stamping other herds with the good qualities that I had succeeded in fixing in my herd. If in need of first-class Chesters come and see me or write your wants. Only the best sold for breeders.

T. A. STEVENSON, Shannon City, Ia.



ENON HERD

CHESTER WHITES

Have some extra choice Fall pigs, both sexes. If you are looking for good ones write me. Barred Plymouth Rocks, best strains. Birds for sale. Eggs in season.

D. W. SHELLABARGER, - ENON, OHIO

O. I. C. CHESTERS

Good Enough for Any Herd



I have young boars. October farrow, sow same age, will breed them if desired. If you are looking for a fine pig, spring farrow, bred so that they will produce good animals, write me. One half in purchasing is to get an animal that does not trace to any poor animal.

Have 50 early March pigs

Write at once for what you want and let me tell you about what I can do for you.

C. M. GRIFFIN, Charleston, Ill.

BLOODED STOCK

Pig Pens in Summer

In summer, if the pig keeper is wise, a large proportion of his stock will be running out to grass. Then of course is an opportune time to give the vacant piggeries a thorough cleansing and lime washing to set drainage of yards and outlets right and attend to any structural repairs that may be necessary. As a rule the piggeries are about the most neglected set of buildings on the farm. If they are in bad condition and need repair the business is frequently deferred until they come perilously near to a tumble down state. It would be well to remember that the words from bad to worse, apply very pointedly in such circumstances. Piggeries there are in plenty that have never known the touch of a brush or broom on their walls or their occupants—refreshing and healthful atmosphere resulting from a good lime washing.

If a farmer has no pasture to spare and the pigs as a consequence must be stykept all the summer, all the more reason that the piggeries should be sweet and clean and the animals kept under the healthiest condition possible. It is the worst thing in the world for pigs to be cooped up in a dirty, badly ventilated sty during hot weather. Very hot, sultry weather is very trying to pigs, although many people seem to be ignorant of the fact. Take a look around on a warm day and observe how they seek coolness, fresh air and such shade as they can get. Truly the house-bound pig in summer is often a creature to be pitied and might in common fairness be made more comfortable than he is. When pigs cannot be let out to pasture, owing to lack of the necessary land, it is a wiser plan to reduce the stock than to run any risk by overcrowding in pens. There is a great tendency to keep too many pigs in a pen in proportion to its size. It is seldom roomy enough to allow the animals to be comfortable and to force them to be packed almost as closely as sardines when the air is heavy and oppressive, and the sun radiates the full heat of summer, is to court disaster. Too thick on the ground might be quoted as the inciting cause of many sudden pig losses. It is a thing to be stringently avoided.

On a dairy farm especially should the piggeries be kept on sanitary lines. If neglected offensive odor arising from them penetrates far and wide. In many cases the dairy is not far away. This is a point which should be watched. When building or rebuilding pens, let them be as far removed as possible from the dairy, for this is not only objectionable but really harmful as few things absorb the impurities of the atmosphere more than milk. Foul air and bad odors should be kept away from it as much as possible. All drains on the farm should be kept in good order and the piggeries should be well attended to in this respect as the stables and cow barns. If you can put your pigs on pasture do by all means. There is no better or cheaper way of making good bacon. If you cannot see that your porcine stock have clean pens and well drained outlets, sufficient living space, fresh air and sound wholesome food. If every pig keeper of pigs were to resolve that nothing should be lacking as regards proper treatment of his stock, swine fever and the like would be practically done away with. Healthful conditions are essential to maintain health and when the body,

W. L. Hammond, R. D. 2, Oswego, N. Y.

Breeder of
Large English Yorkshire Swine
The kind that grow large.
Write wants. Prices reasonable

SHORT-HORN BULL CALVES

Chester White Pigs; and Eggs from pure bred White Plymouth Rock Chickens. \$1.00 per 15.
JOS. T. FLEMING, Beileville, Pa.

FOR SALE—Holstein Bulls, all ages up to one year from cows that have records up to 30 lbs 12oz of butter in 7 days. Are richly bred and good size. Chester White Boars ready for service and young pigs either sex at farmers' prices. S. F. WILLIAMS, Canton, Pa.

Primrose Herd Large English Yorkshires.

From Imported Stock. Second to none. Write wants.
A. A. BRADLEY, Frewsburg, N. Y.

CHESTER WHITES AND POLAND-CHINAS.

20 choice Spring Sows, open; 25 Fall Pigs, both sexes, and also some very fine yearling bred sows that are extra fine and were prize winners last Fall. 12 head Poland-Chinas from 3 to 12 months old. I never had a better offering in young sows than this.

C. R. CRESSMAN, Bursonville, Bucks Co., Pa.



OAKVIEW HERD

— OF —

POLAND-CHINAS

I have for sale 10 Head of Choice Gilts of Last of April farrow, bred to "Handsome Sunshine" for May farrow. Also choice fall pigs of both sexes. Special price next 30 days to make room. For particulars address:

W. H. CRESWELL, Cedarville, O.



POLAND-CHINAS

of Best Strains

CHEAP

Pigs by Mr. Black Mischief Maker 33711 and Siefker's Sunshine 101449. Dams are by 10 different noted boars. I have shipped to 19 states. Satisfaction guaranteed. Write for circulars and particulars before you buy.

A. F. SIEFKER
St. Charles Co., DEFIANCE, MISSOURI

Bursonville, Bucks Co., Pa. GREENWOOD STOCK FARMS

Farmers and Breeders I now have a large stock, probably the best I ever owned, thoroughbred Poland-China and Chester White Pigs, 2 to 6 mos. old, sows bred, boars ready for service, all from prize winning stock. Guernsey and Jersey Cattle. Buff and Barred Plymouth R. Chickens. Farms and Residence, Greenwood, Pa. Address C. H. DILDINE, Route No. 1, Rohrsburg, Pa.

Bargains in Poland-Chinas, Berkshires & Chester Whites

I now have a large stock of probably the best I ever owned. Cannot tell you all here, but I have Boars and Sows, all breeds, 2 to 6 months old, mated not akin; sows bred and boars ready for service. Guernsey Calves and Registered Scotch Collie Puppies. Write for prices and free circular. This stock must go and will be sold. M. B. Turkey, Barred and White P. Rocks, Brown Leghorns for sale.

P. F. HAMILTON, Cochranville, Pa.

animal or human, is in a perfectly sound state the result of living under such conditions, it is capable of resisting the inroads of disease.

There is such a variation in results of experiments conducted to ascertain whether it is best to grind feed for hogs that the individual feeder is left to be his own judge and to ascertain for himself whether it pays best to grind the feed or to feed it whole. My experience has been that young animals will chew their feed better than old ones, and that almost any hog will chew corn very well before it dries out, while young will chew dry corn reasonably well, old ones are liable to pass half the grains unbroken in their voidings, says J. P. Fletcher in the Indiana Farmer. Last year I took a stag 5 years old, and after the corn got dry he did not, from appearances, break half the grains. I am fattening a sow of about the same age and the same is true with her. I am feeding her ground feed now however and feel pretty sure that it pays me to go to the trouble of grinding it. If the grains are not broken it is a clear case that the animal will not get much benefit from the feed, and when any considerable quantity of grains are voided without chewing by the animal it would seem to be the best plan to have the feed ground. Of course it will be some trouble and cost to grind the feed but if the animals are not chewing their feed well the extra trouble will be amply repaid in extra gain from the same amount of feed.

Our old friend H. M. Morris, Mt. Morris, Mich., now Supt. of the great Aldoro Farm, Rossion, Pa., is advertising some fine Guernsey cattle. Here is an opportunity for you to get extra fine ones. Among the offering are animals that were at St. Louis in 1904. Write at once.

Alfalfa seed comes high, but alfalfa is the greatest forage crop now known. Purity of seed is of the highest importance if disappointment is to be avoided; good germination is essential to a perfect stand. The defects of alfalfa seed and how they may be detected are described in Bulletin No. 133 just issued by the Agricultural College. It may be obtained without charge by writing to the Agricultural Experiment Station, Manhattan, Kansas.

The Book Of Alfalfa.

It is not expected nor intend that this work shall supersede or in any way interfere with the smaller 50-cent book of mine—ALFALFA—placed on the market by the same publishers in 1901, and enjoying such a wide sale, but it is to supply those who desire still more complete and detailed information upon all phases of the wonderful forage plant with which it deals; in fact to be a quiet complete Alfalfa text-book and cyclopedia.

Very sincerely yours,
F. D. Colburn.

The International Stock Food Co., Minneapolis, Minn., writes that March, 1905, we did such a tremendous business that we were doubtful if it could ever be equalled. In view of this fact, it is with pleasure that we can inform you that our sales in March, 1906, were very much larger than our sales for March, 1905, and that every month

BLOODED STOCK

this year has shown a large increase over the same months of last year. Twenty years ago International Stock Food was placed on the market and every year, without a single exception, has shown a large increase over the preceding year. Our trade is rapidly increasing throughout the entire world and has become truly International. This record certainly proves high quality because no goods, without high quality, could possibly show such a record.

Our chemists analyze every ingredient we use and they have positive instructions to reject any shipment that does not show purity and high quality. In this way we know that all of our preparations are made right.

The Twenty-First Annual Meeting of The Holstein-Friesian Association of America will be held at the Yates Hotel, Spracuse, New York, on Wednesday, June 6, 1906, at 10 o'clock A. M. for the election of officers and the transaction of any other business which may legally come before it.

A reduction to fair and one-third, on the certificate plan, has been secured for those attending the meeting of Holstein-Friesian Association of America; Syracuse, N. Y., June 6, from points included by the Trunk Line Association, the New England Passenger Association, and the Central Passenger Association.

All persons interested in Holstein-Friesian cattle, whether members of the Association or not, are most cordially invited to attend this meeting.

We do all kinds of Job Printing. Send us your work, it will be promptly done. Write us about it.

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent or exchange, poultry, poultry supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants, and vegetables. The cost of advertising is

Only Two Cents a Word, all classified. Each initial or number counted as one word. No advertisement taken for less than 25 cents each issue. All replies must be sent direct to advertisers. Cash covering the exact number of words at 2 cents each must be sent with every order.

This Department for Live Stock Only.

CATTLE.

SUNNY SLOPE HERD of Red Polled Cattle—the beef and dairy breed. Choice young stock for sale. L. H. WALKER, Reed City, Michigan.

SHORT HORN CATTLE Either sex, fed, bred right herd of fifty. JNO. NORTHCUTT, Cynthia, Kentucky.

JERSEYS—Combination and Golden Lad. For sale—10 cows, 10 heifers and 20 bulls. S. E. NIVIN, Landenberg, Pa.

HOGS.

REGISTERED DUROC SWINE, eight week old pigs and service boars. WM. HARSHMAN, Utica Mills, Md.

LARGE English Yorkshires, sired by "White Side Comet". CHAS. S. SNOOKS, Utica Mills, Maryland.

CHESTER WHITE PIGS, \$4.00. Rose and Single Comb Buff Leghorn and Orphington eggs \$1.50. Short Horn Cattle. ORCHARD GROVE YARDS, Logansville, O.

POLAND-CHINAS. Choice spring pigs from registered stock. Price 1 to sell. C. O. CARMAN, Trumansburg, N. Y.

PURE BRED Chester White Pigs at all times, \$10 per pair and up. WILL H. CARL, Elysburg, Pa.

FOR SALE—O. I. C. Swine, including pigs and sows bred. W. C. CRUSER, Montrose, Pa.

POULTRY

BRED TO LAY FOWLS—All varieties—Wyandotte, Plymouth Rocks, R. I. Reds, Indian Games, Leghorns, Minorcas, Cochins and Seabright Bantams. 1st prize winners Orange, Ulster, New City, Walton, Owego fairs 1905. Eggs and stock for sale. Registered O. I. C. Swine (all ages.) Prices right. Write wants. WALTER G. SNIDER, Walden, N. Y.

POULTRY CATALOGUE FREE—Wyandottes, Red, Barred Rocks, White Leghorns, Bronze Turkeys. Satisfaction guaranteed. Reasonable prices. FAIRVIEW FARM, Shrewsbury, Pa.

NELSON'S guarantee a fair hatch from their famous egg producing strains of Barred Rocks and Brown Leghorns. Write NELSON'S, Grove City, Pa. R.F.D. No. 12

100 TURKEYS, Selected stock, Mammoth Bronze, White Holland, Buff and Narragansett. Eggs \$2 per 11, 15 varieties, poultry eggs \$1.00 per 15. S. DURIGG & SON, Armstrongs Mills, Ohio.

WHITE PLYMOUTH ROCK EGGS, at \$1.00 per setting. First class stock. H. L. NEAR, Jamestown, N. Y.

BUFF ORPINGTON eggs 15, \$1.00. Barred Rock eggs 15, 75c. Also Barred Rock Stock, Hens and Roosters \$1.25 each. Berkshire pigs cheap. W. A. LOTHERS, Lack, Pa.

WHITE WYANDOTTES. Write CHAS. DARONE, York, Pa., Specialist.

MAMMOTH Pekin Ducks, Buff Orphingtons and White Wyandottes, eggs \$1.50 15. MARY DARONE, R. 6 York, Pa.

FANCY POULTRY Eight colored page price list free. Address, G. G. Shoemaker, Box 88, York, Pa.

WHITE and BARRED Plymouth Rock fowls and Mammoth Bronze Turkeys. R. H. McFADEN, Oxford, Pa.

EGGS for Hatching—Rose Comb Rhode Island Reds. Price \$1.25 per 15. D. C. HUTCHISON, Oxford, Pa.

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GENTLEMEN:—I have seven Brood Sows that pigged last week, all in four days, sixty-four fine big pigs. Have fed these sows "International Stock Food" every day. Also fed it to sixty head of steers which are doing well. One of my neighbor's hogs had the cholera the first of the year. There was only a wire fence between his hogs and mine. I fed my hogs "International Stock Food" every day. He lost all his hogs except three out of fifty. I am about ready to purchase another hundred pounds of "International Stock Food" as I feed it every day.

Yours truly,

W. B. ELLIOTT.

"International Stock Food" purifies the blood, cures disease, tones up and strengthens the system and greatly aids digestion and assimilation.

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experience with them they have averaged I should say from three to five pigs more per litter than the lard type of hogs. The feed raised on Minnesota farms is well calculated to make a first class quality of bacon and I believe that the product of flax, wheat and corn fields will yield more profit per acre if fed to the bacon type hog than it will if fed to any other class of stock.

Swift & Company, of St. Paul, Minn., endorse the Yorkshire breed and have for some time been encouraging the farmers of the Northwest to produce more bacon hogs to help fill the increasing demand of this class of product.

Poultry Notes

The hatching season is now on and complaints will soon be made that the eggs are infertile and will not hatch. One great cause of the infertility of eggs in the early season is that the hens are too fat, but after they get some of their flesh by laying, the eggs will become fertile. The remedy is not to feed so highly but make the hens scratch for their feed.

We are of the opinion that in feeding young chicks the dry-food system is much better than the old-time, sloppy-food system. For the first two weeks feed pin-head oatmeal, millet and cracked wheat. After that time, whole wheat and Kafir-corn with cracked corn given occasionally, will make them thrive. See that the chicks always have plenty

of grit or oyster-shells with occasionally same in at scraps. Pure water should always be provided for them. Fowls are quite likely to contract disease in the spring by allowing them to gorge themselves on grass and green plants, after having been closely confined all winter. They should be allowed to forage in early spring by remaining outside only a short time at first, which can be gradually increased as they become accustomed to it. At first they should run just a few moments before dark, giving them their liberty, turning them out a little earlier each evening. Internal fever, diarrhoea, and sometimes chicken cholera are induced by allowing fowls to eat too much green food at one time in spring, before they have gradually become accustomed to it.

Burn the litter and trash that accumulates in the poultryhouse, frequently. There is no excellence without great labor, and it certainly is as true in the poultry business as in any other business.



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I have them combining the best blood in Chester County. If you want the good old Chester that has made this county famous, we have them here that will please you. We breed and sell only the best. Write me.

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Did You Ever Sell a 7 Months Old Pig for \$850? AND ONE LITTER FOR \$1,657.50?

W. G. CAMFIELD & SON, Breeders of POLAND CHINA HOGS.
Pure Bred

COWDEN, ILLINOIS, JAN. 16, 1906.
INTERNATIONAL STOCK FOOD CO.,
MINNEAPOLIS, MINN.

GENTLEMEN:—I want to tell you about a fine litter of pigs that I raised last year. As I had a good litter of pigs out of E. L. Delightful I wanted them to do extra well, so I bought one hundred pounds of "International Stock Food" and fed it to them every day up to sale time when they were seven months old. From this litter came Masticator, the highest priced pig that was ever sold at auction at that age. The Goodrich Stock Farm at Eldon, Mo., paid \$850.00 cash for this seven months old pig, which broke all sale records for this age. The entire litter brought \$1,657.50. I will certainly continue to feed "International Stock Food" because it is reliable and makes us money. I will soon want another supply.

Yours truly,

W. G. CAMFIELD & SON.

"International Stock Food" purifies the blood, cures disease, tones up and strengthens the system and greatly aids digestion and assimilation.

A MARK HERE means that this paper is sent to you as a sample copy. We wish you to look it over and we feel that you will find it one of the best live stock papers you ever read. Below you will find our subscription offers and trust to be favored with your order.

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- No. 3. Send us \$1 and have your subscription advanced 3 years.
- No. 4. Send us \$1 and have your subscription advanced four years and get your choice of recipes for Scours and Thumps or Plans for building a Hog House.

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Successful Farming, Des Moines, Ia. This great agricultural paper has won a name in the corn development now going on in the West. How to select seed, how to plant, how to cultivate so as to increase the bushels per acre is important to every farmer. This paper and **Blooded Stock** both one year for 40c. **Agricultural Epitome, Spencer, Ind.** is a great monthly farm paper printed out on a big 320-acre farm, where experiments are conducted by experts and the results published in the paper. This makes it a paper of great value to the business farmers who want to keep posted on the best and latest methods. This paper and **Blooded Stock** both one year for 40c.

Farmers' Voice, Chicago, Ill. is one of the finest illustrated farm monthlies published. It is a regular family paper, concerning not only the farm topics but also the household, making it one of the most valuable papers printed. Every issue is worth the subscription price. This paper one year, along with **Blooded Stock**, for 65c.

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OXFORD, PA., JUNE 1906.

No. 4

Selling Hogs at Private Sale

To sell a hog at private sale is a very simple matter when your customer is present and you have a good individual to show him, especially if your price is in accord with the value of the animal.

Records should be at hand, showing that you know when the pig under consideration was farrowed, and the sire and dam. The animal properly and plainly marked to correspond with the record given, inspires confidence, and by courteous treatment and patience, your sale is easily made.

I have always found it a good plan to have a price on every pig on the farm. Price those that you do not want to sell, high enough that you may feel reasonably sure that you can keep them, but if a customer does buy, you can feel satisfied with the sale no matter if it does spoil a show herd or take a herd boar which you would rather have kept. Have a price, though, on your stock, so that customers will not go away and say, "Oh, yes! Jones has some good things but he will not sell them."

Unless a customer has confidence in you, there is little hopes of selling anything to him, and confidence is most easily gained by having complete records. Show your system of marking and of keeping your breeding record, which should be such that any customer could go to your farm and identify every animal on it. Some years ago, when looking for a boar, I called upon a prominent breeder expecting to buy. He took me into a bunch of about ninety boars, eight months old, a very uniform lot and good ones, but there wasn't a brand, tag or mark on any of them. I asked concerning the breeding of some of them and he was always ready to give it. The question in my mind, though, was, "how does he know?" and when finally I asked him, he said, "That is no trouble, I raise them and feed them and know them as I do my children," but I could not believe it. I did not buy, and have always doubted his records.

Nothing elaborate is needed in keeping a breeding record, but it must be done systematically and in such a way that only a minute's time is needed to find out what is wanted.

If the herd is large and a hired man is kept, I have found a daily report most satisfactory. This report must give a record of sows-bred and name of boar used, sows farrowing, sire of pigs, number in the litter and sex. This record is very essential in selling pure bred hogs.

Some men always lie when selling their hogs, which is a fatal mistake if one intends to stay in the business. Lying is about the worst habit a man can acquire. It grows on him very rapidly, and nothing is so detrimental to his business as to get such a reputation well established. And think of the bother of having to try and remember what lie was told about that pig so as to be able to tell it again. Much better get right out of the live stock business, where dependance on one's word necessarily means so much. Always tell a prospective customer (or any one else for that matter) the truth and the whole truth. If an animal has a defect and your customer does not notice it, show it to him or tell him about it, if he does take that animal, but the chances are he will take another. If, however, an animal with a defect is sold him, he will discover it sooner or later, and it will be the last you will sell to him or to his neighbors. So I say, "Tell the truth and tell it all."

As most of the hogs sold at private sale are sold by correspondence, attention should be called to that part of the business. In the first place, there is nothing more important than promptness. Be prompt in answering all inquiries. When a man writes asking for the price of a pig, answer the letter the same day it reaches you. When you receive an order, acknowledge the same at once, and notify your customer when shipment is to be made; then, without fail, ship on the day and train named. On the same day, send him pedigree and to the secretary send application for record. In this way you will have a pleased customer as far as this part of the transaction is concerned, and if you have given proper description he will be entirely pleased. If one is busy and working hard, only giving part of his time to the hogs, his correspondence is a task. Take care of it though, even

if it necessitates getting up an hour or so earlier. You can write more intelligently early in the morning. I wrote this at night, so profit by my experience, and write letters and articles of this character while the mind is fresh after a good night's sleep.

Many of you will say, "You have told us how to sell our pigs but not to whom to sell them. Where are we to find buyers?" We can raise pigs, write the letters and tell the truth, but where are we to find the victim?" It is the old story—you will have to advertise. "How?" Well, if you are a new beginner in the business, know of no better way than by first going to your country fair with a show herd; then to the larger fairs as you find you can win. Make the fair circuit, taking in all the shows that you can and then use the papers to tell the people what you won and what you have to sell. Showing at the fairs will do you lots of good. If you do not have the right kind of hogs or do not feed them and fit them as you should, there is no place where you will find it out as quickly as at the fairs. There are altogether too few of our old established breeders who show. The breed would be helped by having them come out oftener, but when you can, get out and show against them, and by so doing you will see how your hogs compare with theirs. If you are not breeding in the right type, make a change. There is nothing that tends so much to improve the live stock of the country as the fairs. They stimulate us to breed better stock. We all want our stock to be better than our neighbors. If you have not that ambition, you are of no good to the breed, yourself or to anyone, and the sooner you are out of the live stock business, the better for all concerned.

Do not misunderstand me. Be judicious in your advertising. Do not spend on it more than you can afford. Don't rush into print unless you have something to say or something to sell. In writing to a prospective customer do not over estimate the merit of the animal that you are offering. Describe it so that when received he will be pleased and will not

(continued on page 9)

BLOODED STOCK

FOR PRACTICAL STOCK BREEDERS AND FEEDERS

PUBLISHED MONTHLY AT OXFORD, PENNA.

UNDER EDITORIAL MANAGEMENT OF C. E. MORRISON.

Questions—Subscribers of the paper are at liberty to ask questions on any subject concerning which they desire information, and these questions will be answered as promptly and carefully as possible, either through the paper or by mail. When asking for information always enclose a 2-cent stamp for postage in case an answer by mail is necessary.

Advertising Rates sent on application.

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FEEDING CORN TO HOGS.

They Must Have Supplemental Foods Rich in Protein.

By Prof. Mumford of the Illinois Experiment Station at the Indiana Live Stock Convention.

We have spent the day in learning how to raise more corn and better corn. The next question that naturally comes to us is—what are we going to do with this corn? I wish that we had a day for this part of this subject, but as we have only a few minutes I will be just as brief as I possibly can and bring out the main points on feeding corn to hogs.

Anybody can fatten a hog if he feeds it corn long enough, and because this is true less attention has been given to care in feeding than if it were a difficult matter. But because of competition and the more expensive methods of living on the farm, farmers are everywhere looking more closely to the cost of production. It is so very long that we farmers called the difference between cost price and selling price, gain. We were satisfied to feed our crops into our live stock without knowing a certainty or even in a general way whether we get a fair price for our produce or not. Today we are not only asking if we get market price for our corn and hay and small grains but what the net profit is. It can no longer be hit or miss; it must be hit or quit.

I said a minute ago that it is so easy to fatten a hog that we sometimes forget that he eats anything. But he does, and sometimes as much or more than he is worth. I found out several years ago when we fed a carload of hogs on corn alone, and having kept a careful account of the feed, found that they had only barely paid for their feed, leaving no profit nor anything for the work. We are trying to get the greatest number of pounds of pork for the fewest pounds of feed. I know that corn alone will fatten a hog, but I know, too, that it does not have in it the material to make bone, muscle and fat in the proportion scientists tell us are best and my own experience would lead me to believe.

Therefore, does it pay to feed corn to hogs at the present prices? If we feed corn alone, no. If we feed a good supplement to the corn, yes. Today there are hundreds of farmers in the State of Indiana who are feeding corn to hogs and losing money on every ear they throw out.

Do not misunderstand me when I say "losing money." The corn has probably only cost around 15 cents to produce, but this corn is worth 40 cents on the market and it is the market value we must always consider. It has been absolutely proven by a number of the Experiment Stations that corn alone, even when so low that there is apparently large profits in feeding it, is an expensive and not a desirable hog feed, for several reasons.

1st. Did you ever notice the difference in your pigs when you feed nothing but corn to the sows before farrowing and when you feed bran and tankage or any protein food in addition to the corn? I have. On corn

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alone the pigs come weak and small, and the flow of milk was limited, but when fed protein in addition to the corn the pigs grow big and strong, and ready for the large flow of milk which under natural conditions is certain to follow.

2nd. It pays to supplement corn from the standpoint of health. Upon examination in slaughtering it has been found that the stomachs of hogs fed on a whole corn diet are seldom in a healthy condition, the contents being sour and having an offensive smell. Consequently when the cholera comes along it takes the hogs whose vitality is least able to resist disease. I have in mind a friend who raises a great many hogs. He refuses to feed supplements to the corn, so he continues to throw out corn as do a majority of farmers from the time the pig is born until he goes to market, if he lives long enough to get to market. Twice within the past five years this friend's herd has been attacked by cholera with heavy losses. I admit that you can not always keep off disease by proper feeding, but I do know that hogs fed properly have more vitality to resist disease.

3d. The more rapid the growth the greater the profit. Rapid growth is absolutely impossible on corn alone. As we all know, corn has too small an amount of the parts that make bone, blood and muscle and too much of the parts that make fat to be a desirable feed by itself. Now some one will probably say that it is all right to supplement corn for pigs, but there is nothing better for fattening. Well, perhaps that is true if you grow your hogs and fatten them. But let me emphasize right here that if you are going to make the most and by far the most out of your hogs, fatten them while you grow them, then when they are grown they are ready for the market. So that you will not think I am just talking I will give you a few figures from my own books for the past year. Sixty-five February pigs sold when six months old averaged 195 lbs. These pigs were sold on the 15th of August to the local buyers for 6c and made a profit of about \$253.50 for our work. Forty pigs that came on the 1st day of May sold on the 1st day of December, 7 months old to the day, averaged 221¾ pounds, sold at \$4.60. Now remember these pigs were fed 50 cent corn the greater part of the time and sold at \$4.60, but still cleared \$53.20 for our work. This would have been absolutely impossible on corn alone. Both lots of the pigs were fed corn 7 parts, bran and middlings 2 parts and tankage one part. By numerous experiments at Purdue they have found that on corn alone at 50 cents it costs from \$5.10 to \$5.20 to produce 100 pounds of pork. While by making the ration corn and middlings equal parts and tankage one-tenth part they produced pork as low as \$3.60 per hundred; or with nothing added but one-tenth part tankage the increase in pounds was greater but the profit was not so good.

The Missouri Station, also, has carried on extensive experiments in hog feeding. I would like to give you a few of these results. Cost of production on corn alone at 40 cents, \$4.95 per hundred. But with one-fifth part oil meal the cost was lowered to \$3.37, making a difference of \$1.58 on each hundred pounds of pork by adding one-fifth part oilmeal. With corn at 50 cents the difference was still greater. Cost of corn alone \$6.19. With one-fifth oil meal \$3.99½, thus making a difference of \$2.19½ in profits on each 100 pounds of pork. And once more with corn at 60 cents, (and I have known men to pay 60 cents for corn, haul it home and throw it out to hogs) they found that it cost \$7.42; but by adding one-fifth oil meal the cost was only \$4.61, making a difference in the profit and loss of \$2.81 per hundred. Do not these experiments prove to you that we must feed a supplement to corn if we do not wish to feed corn at a loss?

Now a word in regard to the best supplement to be used. Keep in mind that the food must be palatable. Do not starve your hogs until you make them eat what they do not relish. One of the greatest things to make all foods palatable is salt. Be afraid of feeding too little rather than too much. Salt is a constituent of animal tissue and of the blood and acts as a tonic or stimulant to the internal organs. We feed as high as one quart a day to from 15 to 30 hogs, depending on the quantity of food they are consuming.

The most profitable supplements that have been found are linseed oil meal, tankage, soy beans, wheat middlings and milk in connection with clover and alfalfa. In closing let me repeat that corn alone does not support normal growth nor produce rapid gains. That by adding protein to the ration we get more pounds of grain feed and produce healthy, marketable hogs in much less time.

BLOODED STOCK

INDIVIDUALITY OF COWS.

Address at National Dairymen's Convention, Chicago, by H. B. Gurler.

This question has been threshed over and over for the last half century, and it would seem that it must be worn out, but its importance keeps it ever before the enterprising dairyman. The difference in the ability of individual cows to produce economically is something remarkable. How this is we do not yet know, nor is it necessary to our success that we do know, but it is very necessary to our success that we know the ability of each cow to produce profitably, and we can afford to wait patiently for experimentation to show how one cow can produce much larger returns from the same food than another.

This question has been an intensely interesting one to me for nearly 40 years, and now as my mind goes back to some of my early efforts to learn the capacity of my individual cows and the crude and laborious methods then in use, and I compare them with the present quick and accurate methods, it makes me feel that I was born too early, and causes surprise that any dairyman can now be content not to know the productive capacity of each individual cow in his herd.

I well remember that my first efforts at learning about the productive capacity of my individual cows were with the cream gauge, and how disgusted I was when I learned that the weight of milk and the per cent of cream shown in the glass tube was not a reliable basis on which to judge the productive capacity of a cow. This knowledge forced me to adopt the plan of setting each cow's milk by the gravity process, and when the cream was secured churning it separately. To expedite this work I improvised a set of six small dash churns that I could churn at one time.—Now—thanks to Dr. Babcock—we can very easily tell what each cow in the herd is doing as frequently as we wish.

In thinking how I might possibly put this matter in a new light to some dairymen, I have thought to talk of the dairy cows as an investment, and to take as my text some of the work done by A. J. Glover, when he had charge of the field work for our agricultural college and experiment station.

One dairy of 50 cows that he had supervision of for a year produced an average of 298 pounds of butter. The average cost of feed was \$41 per cow. In this herd were four cows that produced an average of 166 pounds of butter for the year's work. It cost to feed them \$34 per head. When we have credited them with the butter at 20 cents per pound, and the skim milk they produced (288 pounds per cow) at 25 cents per 100 pounds, and added to the cost of feed \$12.50 for labor for each cow, we have the cows in debt to us a little over \$6 per head.

With this quality of cows, if the owner did all the work himself, and had cows enough to keep him at home to work all the time, he could earn \$1 per month and board himself. In this herd, the cows that produced 200 pounds of butter at a food cost of \$39 per head, just paid out, or in other words, if he had all of such cows that he could care for himself, he could make \$25 per month and his board.

In this dairy were four cows that made an average of 447 pounds of butter per cow, which at 20 cents per pound is \$89.40, to which we will add the 8,700 pounds of skim milk at 25 cents per 100 pounds, and we have a credit of \$111 per cow. It cost to feed these cows \$45 per cow and for labor \$12.50, leaving us a net profit of \$53.50 per cow. With 50 such cows a man could pay for all the labor and have an income of \$2,500 per year, if he does not get to thinking the business will run itself and fail to properly superintend it.

The cows in this herd that produced 200 pounds of butter annually were worth what they would sell for to the butcher, or to some dairyman that was willing to work for \$25 per month.

What are the cows worth that produce 400 pounds of butter per annum? Here I am going to make a statement and undertake to prove it correct. When the cow that produces 200 pounds of butter per annum at a food cost of \$39 and a labor cost of \$12.50, is worth \$35, the cow that produces 400 pounds of butter annually is worth \$400, and the owner can make net \$16 more from her after paying the interest on his \$400, than he can from the cows that produce 200 pounds of butter.

There is no more labor connected with the 400 pound cows than there is with the 200 pound cows. The price at which the butter has been credited, i. e. 20 cents per pound, is the net price from the creamery after the mak-

ing has been paid for. In this herd the increased cost of feed for the 400 pound cows was more than offset by the increased amount of skim milk, so we have the 200 pounds increase of butter as net profit over the 200 pound cow. Two hundred pounds of butter at 20 cents is \$40. We have \$400 invested in these cows which at 6 per cent interest is \$24, which we will deduct from the \$40, and we have left \$16 to the credit of the 400 pound cow.

Some have said to me that the risk from injury or death is much greater with \$400 cows than with cows worth \$40 to \$50. But if a dairyman raises his heifer calves, as every dairyman should, he can insure himself against this extra risk by raising the heifer calves from the 400 pounds cows bred to a bull whose family has a record equal to the cow. In this way the dairyman is safe to figure on the cow leaving three heifers that will equal their dam's record.

Here is a field where the creamerymen can do much to help their patrons and indirectly help themselves. Every aid a creameryman can give his patrons to increase his profits will bring an increase of business to him. I know a creamery firm that put a man with a scale and Babcock test at work among their patrons, only asking the patrons to board and lodge the man. This work increased the profits of the dairymen and also the creamerymen, and created a good feeling among the patrons toward the creamery. It is a safer rule to help yourself by helping someone else than it is to leave the other fellow out.

Now are we going to keep 160 pound cows and receive \$15 per month for our labor, or 200 pound cows and receive \$25 per month for our work, or shall it be 400 pound cows and receive \$75 per month, or will we go still better and secure cows that will make 450 pounds of butter per year and receive a salary of \$1,000 per year for looking after the men that are doing the work? This is based on what one man can care for, or fifteen cows.

SOIL INOCULATION.

The Ames Experiment Station has just issued a bulletin devoted to what are denominated "Misrepresentations Concerning Soil Inoculation." The subject of soil inoculation has received wide attention throughout the United States within the past few years. The value of the leguminous crops in systems of soil fertility and for furnishing nitrogenous feed for farm stock cannot be too highly emphasized.

In many sections of the United States the farmers have not yet come to a full appreciation of the value of these crops. Scientific discoveries concerning the methods of growth of the leguminous crops have been of far-reaching consequences and of immense value to American agriculture. The Bulletin says:

It is unfortunate, however, that some unscrupulous seedsmen and dealers in cultures have taken advantage of information that has been published on soil culture and diverted it to their own use for personal gain, to the detriment of farmers of this and other states. On account of the misrepresentation concerning this matter correspondence is submitted in the form of a press bulletin, which it is hoped will be given a wide circulation.

The correspondence includes a letter to the station from T. D. Crane, in which it is said that "there are certain seedsmen and seed concerns throughout the country who are now claiming that the seeds of all the different classes of legumes such as soy beans, peas, peanuts, and alfalfa have to have special forms of nitrogen culture to use on the seeds where introduced into new soils or soils that have not been adapted to that special class of the legumes, and that land that was adapted to alfalfa might not be adapted to clover unless the special nitro-culture for clover was to be used upon the seed."

Mr. Crane inclosed in this letter the circular of a seed institution offering to sell packages of bacteria at so much an acre. All of this was sent forward to the department at Washington, and Professor Curtis is in receipt of a final reply from Dr. B. T. Galloway, chief of the bureau of plant industry, and includes it in the bulletin, saying:

"It is needless to add anything to the above correspondence. These letters indicate clearly the fraud that is being perpetrated under the guise of science. The farmers of Iowa and other States with similar soil conditions should waste no money buying bacteria. Barnyard manure and thorough tillage are worth more than all the nitrogen cultures on the market. Put the soil in good enough condition to grow seventy-five bushels of corn per acre, then sow twenty pounds of alfalfa seed about the middle of August, following a crop of small grain, and the question of cultures will take care of itself.

The Utility of the Standard Bred Trotter

(From an address delivered by Hon. Norman J. Colman, former Secretary of Agriculture, at the Live Stock Breeders' Meeting, Columbia, Mo.)

I don't know but I ought to say in introducing myself, as most of the gentlemen who have spoken to me have done, that I was born upon a farm and had to work as hard as any of you. I don't except any, because my father was a hustler and his two sons had to get up and work with the hired men, from early to late, and when the work was done, we had to come in and milk the cows and do the chores. I thought it was a pretty hard life. I thank God that I was born on a farm, and had to work and develop a sturdy constitution, with which I have been able to fight the battles of life. If I had been brought up in a city or town, I have no doubt I would have been dead years ago; but I strengthened my muscle, and developed a constitution by working upon a farm, which has aided me in the great battle of life; and it has been truly said that you can scarcely mention a man who has distinguished himself in any walk of life, who was not born upon a farm. You must have a sound mind in a sound body—in a vigorous body—and the only way that can be accomplished is by developing the physical system.

I received an invitation to talk to you about the standard bred trotter. I regret to say that I have not devoted a single minute to the preparation of an address—I do not think I have ever been so derelict in my life—and instead of an address it will simply be a talk—an offhand talk, perhaps somewhat scattering. It is true I feel at home in discussing this subject. I inherited a love of the horse and I have never been able to shake it off, and I am glad I have not been, because I think I would have been dead long ago if I had not had something of this kind to interest me in outdoor life.

I do not wish to antagonize any other breed when I speak of a trotting bred horse. There are certain fields for other classes of horses. I have no doubt that there are present those who believe that the draft horse is the only horse to breed, and perhaps those who believe that the imported Hackney or French or German Coach horse is the proper horse to breed, and others that the saddle

horse is the proper horse to breed, and I say I do not wish to antagonize any of them.

Missouri is a great State. It is capable of producing all classes of horses, and I say "God-speed" to every man who can breed any of these classes profitably. If he finds there is a demand for them, it is not only to his interest but it is his duty to endeavor to fill the demand. We need to pay more attention to the breeding, not only of horses of all classes, but of mules. Missouri is a natural stock-growing State. There is no State whose grasses are more nutritious, whose waters are purer, no State that can produce a higher type of all kinds of stock than Missouri, and the preservation of our farms, of our agriculture, depends upon live stock breeding. I wish I could impress this on your minds so strongly that you would go home and preach this gospel to everyone—that the cultivation of our farms in cereals, in the production of grains, and marketing the crops which are so produced, is sure to bring ruin eventually to those farms, as it has done in all the older States of the Union, as it has done in Europe and throughout all nations of the world, which are now buying the cream of our soil in order to raise profitably any sort of crops.

A few years ago I visited Europe. I had at that time served a term at the head of the Department of Agriculture in this country. Through the London papers, Sir John Laws of the Rothemstead Experiment Station saw that I was there; he invited me to become his guest and to visit his experiment station, which invitation I accepted. About the first thing he did was to take me to his library and show me the reports which had been published by the Agricultural Department of the United States, saying: "I know you just as well as your own people do," and then he gave me a severe lecture. He said: "Your people are selling off the cream of their farms to us Europeans." He took me to his stables. "Here," he says, "is cottonseed meal, the cream of the land of your country. I am buying it; English, Scotch, German and French farmers are purchasing it and are getting just double what they pay for it, notwithstanding the freight from your country here. We feed it to our stock

and get compensation in the growth of our animals, and when we distribute the manure over our farms, we again get back our purchase money." He said: "You are bringing ruin upon your country, and if I were an American I would insist upon having a law passed to prevent the exportation of the very cream of the fertility of the soil." He showed me some of the fertilizers, the phosphates, which he was buying from this country; and he said by and by this will be exhausted, and you in America will be in the same condition that we are here in Europe.

I refer to this as an illustration to show that we are causing the ruination of our farms when we sell off our crops; we are selling the nitrogen, phosphate potash—we are subtracting these elements from our soil in every crop we produce, and it is just like checking on your bank account—you will come to the end of it in time, as all nations of the earth have done. This should be prevented. You are not philanthropists; you are not true American citizens if you allow this system of robbery to go on unchecked; and one of the chief ways to avoid this injury to our farms is to go to raising stock of all kinds.

Increase the dairy interests. What wonderful improvement have I seen in our farms about St. Louis, on every dairy farm where they have been in that business for a few years. They buy more or less linseed meal and cottonseed meal; they feed it to their stock; the manure is distributed over the farms; and the pasture has been more than trebled, wherever a farmer has been carrying on the dairy business for a series of years. The same results will occur in the feeding of steers—in raising horses, mules, cattle, sheep, swine—all these animals; and I ask you, as you love Missouri, to become the advocate of a larger system of stockgrowing in the State, and do your utmost to prevent the sale of the riches of your soil by sending your cereals to market. This, perhaps, is a little off my subject, but it is germane to it. You wanted to hear about the horse. I want to urge upon you the necessity of raising horses. Missouri has occupied a high position as a horse-breeding State and she is destined to occupy a still higher one.

The United States Government has

Pilling CATTLE Instruments

Pilling instruments are just the thing for dairymen and farmers. By their use you can cure your own cows and save the expense of a veterinarian—no special skill required.

Pilling Milk Fever Outfit for air treatment, a method that cures 97 per cent of cases treated, recommended by the United States Agricultural Department, with full directions, \$3.00. Cattle Trocar for blood, 1.50. Teat Bistoury, \$1.50. Improved Teat Opener, 75c. Patent Coin Silver Milk Tubes, 50c.

G. P. PILLING & SON,
2224 Arch St., Philadelphia, Pa.




established a breeding farm in Colorado, for the breeding of the American trotting bred coach horse; a horse to be 16 hands high, of good style, of good color, of good size, or good breeding, and after a commission was appointed to endeavor to secure the highest type of such horse, a horse that could be useful for all purposes, and particularly for a coach and a road, park and carriage and farm horse, and after advertising for a typical coach stallion and receiving letters from all sections of the country, saying the writers had just such a stallion, and after a thorough examination the commission finally selected a horse that was raised upon Missouri pastures, fed upon Missouri corn and oats and hay, and drank Missouri water. That horse was a Missouri bred horse, and I had the honor of breeding it.

Now, then, what sort of a horse fills the bill best for the average Missouri farmer? What sort of a horse should be bred to be most useful to the farmer? What type of horse is in greatest demand? Will bring the highest price in market? That is the question that you want to consider. If the farmer is going to erect a building, he is careful beforehand to study the size that he wants, the style he wants, the purpose for which he wants it. He has that all in mind. He would not think of going on in a helter-skelter way to put the building together. I want to know, when you come to breed a horse, if you should not have the type of horse in your mind that you want to breed, you should know something about the size you want, the color you want, the action that you want, the temperament that you want, the purpose for which you can use it, and after determining in your own mind what you want, then go to work and breed it.

What sort of a horse is that? I think that nine farmers out of ten would say, "for my purposes—to go to church, to ride to the village post-office, to drive in the buggy, in the cart, before the carriage, anywhere and, everywhere, the horse that I want to work upon the farm, must be intelligent, of good color, good action, proper spirit, about 16 hands high and weighing about 1200 lbs." That is the horse that the Government has decided to breed. That is the horse that can be used upon the farm in any way that you think proper—in plowing, in harrowing, in cultivating, in hauling, under the saddle, he is just the horse that you want; but how few of us think of breeding just such a horse. We will be satisfied with some nondescript that has no action, no pedigree, no breeding; one not registered; and the farmer who lives nearest will patronize that horse when perhaps a few miles further there is a horse duly registered, of good size, action, and good style; one that is a pleasure to drive, to breed, a pleasure to handle. The farmer will neglect the latter because it costs a little more to breed him. That sort of work, here in Missouri, ought to be abandoned. If I can establish and root in your mind the necessity of forming an idea of what horse you want, and if I can likewise establish in your mind the idea that the great law of breeding, that like produces like, or the

likeness of some ancestor, you will be more careful as to what you breed—as to what stallion you patronize, because like produces like.

The farmer is well situated for breeding the trotting horse. I think it is the best class of horses to work and I work two teams continually of standard bred trotting horses on my farm for all kinds of work, and although not quite as large as I have been describing, yet I have found them very suitable for all kinds of work on the farm. I say the farmer is well situated for raising the standard bred trotting horse, and he can raise his colts at such a season of the year as to scarcely feel their cost. Some will say, "I don't want to breed my mares in the spring, because I have my farm crops to take care of." If you have no more mares than are necessary to do your work, perhaps it is necessary to breed them later. Some of the best horses I have ever raised have been born in the fall; they run with the dam during the winter, when there is not much work to be done, and are

then turned out and weaned in the spring. They have the green herbage to feed upon and no trouble to wean. I think every farmer should keep a half-dozen mares, because if you raise a high quality of horses there is always a demand for them. It costs no more to raise them than it does to raise steers, and they will bring double, treble and sometimes quadruple the price if of the right quality. I have 80 head now on my farm. Horses are no more trouble to raise than so many sheep, if you have got pasturage for them. It is true I have got a never-failing stream of water running through the centre of my farm so that I am not compelled to water them; and I want to tell you that a good stream of water fed by springs that run continually during the year, is a most valuable feature on a farm. Every stock breeder knows that—he does not have to depend on wind mills or gasoline engines, or anything else. The standard price of bred horses is very satisfactory always if they are of (continued to page eight)

Sharples TUBULAR CREAM SEPARATORS

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DAIRY TUBULAR BOWL—All Apart

"Bucket bowl" separator makers falsely claim to make separators with light, simple, easy-to-wash bowls. We are the only makers who dare show a picture of our bowl—all others refuse. There are secret difficulties about other bowls the makers want to hide. Pictures would betray them. Other makers fear pictures. Our handsome Catalog Z-300 tells these secrets. Write for it today.

THE SHARPLES SEPARATOR CO.
TORONTO, CAN. WEST CHESTER, PA. CHICAGO, ILL.

U S U S U S U S U S U S

World's Champion Cow

The Guernsey cow here illustrated has proven herself the biggest butter producer in the world. This letter tells the story.

"Milwaukee, Wis., Feb. 12, 1906.
My Guernsey cow, Yeksa Sunbeam, No. 15439, holds the World's record for a yearly butter-fat production, having made in a year 857.15 pounds of butter-fat. She also made 14920.8 pounds of milk testing 5.75 per cent fat; this is the largest amount of milk produced in a year by any Guernsey cow.

The butter exhibited from my farm was awarded **FIRST PRIZE** over all at the State Dairymen's Convention at Waukesha, Wis., scoring 97 1/2 points.

I use the United States Cream Separator, of which I have three on as many farms.

Don't miss the point of this story: **GOOD COWS and the U. S. CREAM SEPARATOR**

is a combination that means biggest profit to dairymen. You feed your cows to produce rich milk, and to get the most butter-fat from that milk you need a U. S. Cream Separator because it **Holds the WORLD'S RECORD for CLEAN SKIMMING.**

Our new, handsome 1906 catalogue tells all about the U. S. Read it before you put any money into a cream separator. Just write us, "Send catalogue number 1906." You'll get one by return mail. Better lay this paper down and write us now while you think of it.

VERMONT FARM MACHINE CO.
Bellows Falls, Vermont.

Eighteen centrally located distributing warehouses throughout the United States and Canada. Prompt delivery.

U S U S U S U S U S U S

WIDE DIFFERENCE IN DAIRY HERDS.

Prof. W. J. Fraser, Chief in Dairy Husbandry, University of Illinois, writes to the Jersey Bulletin as follows: "As there is a difference in men; in their character and earning power, so there is a difference in dairy herds of cattle found on Illinois farms. The difference in the herds is likely to correspond to the difference in the men. This is admitted as self-evident, but, perhaps, without attaching much importance to the statement. But probably few people have studied these differences enough to appreciate their extent. For instance, would we think, without special investigation, that one herd of cows costing only a third more than another herd, may bring the owner three times, or five times, or even ten times as much clear profit?

Is it clearly understood that some Illinois herds do not pay for the feed given them? That other herds pay too small a margin of profit to justify the investment in money and labor? And that still other herds are making their owners big money? Do dairymen, in general, know that these differences rest on plain causes that may be readily understood, and that a change from the poor herd to the highly profitable herd is a comparatively easy matter within the reach of any farmer who is able to keep cows at all? For answer, look at the following facts personally known to members of this department:

A little study of the individuals show that the handsome cattle have a better dairy form and are in higher condition. It wouldn't be hard to make choice between these herds, just on their looks. And the cows themselves, as seen recently by the writer, show a much greater difference. But the figures on their production, their profits to the farmer, tell a story that pales all these apparent differences into insignificance and forever puts an impassable gulf between these two herds—and the two kinds of cows they represent.

The cows in the better herd were picked up here and there at moderate prices. They have been producing milk throughout the year at the rate of 18 cans to 45 cows, or 2½ cows to a can (8 gallons). The latter herd has been yielding at the rate of 5 to 3 cans to 34 cows, or 6.4 cows to the can.

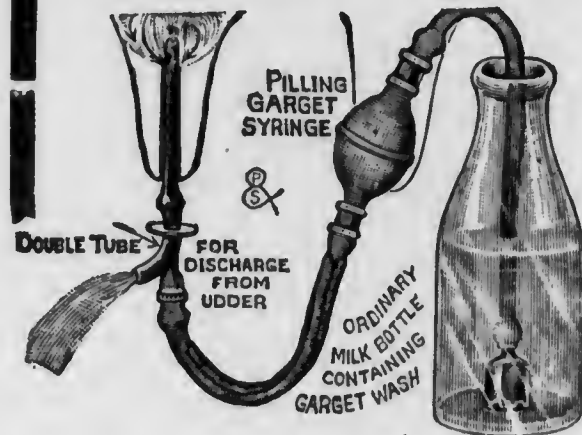
When milk sells at \$1.15 per 100 pounds, this means that the average cow in the better herd produces 29½ cents' worth of milk per day, or \$88.50 worth as the total for a year of ten months. The poorer herd yields 11½ cents' worth of milk per cow per day, or \$34.50 worth for the year. There is some difference between these cows and their incomes.

If it costs \$32 per cow for feed in the poorer herd, just \$2.50 per head is left as the profit for one year. But if the better herd is fed at \$40 per cow, it leaves \$48.50 per head as profit. Here is a difference of \$46 in clear gain, or in other words, it takes 10 cows of the one kind to equal one cow of the other kind. In a herd of 40 cows, this difference would amount to \$1,840.

If a man desired to make \$1,000 per year profit in the dairy business, he

BLOODED STOCK

PILLING GARGET OUTFIT



Sent Prepaid with full instructions on receipt of \$4.00. Includes 30 treatments.

EASY TO USE. SAFE. SURE.
GEO. P. PILLING & SON,
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150 Choice Chester White Pigs

Now on the farm for sale

Our 20 years experience aids us more and more in securing the best to offer you. We sell largely to old customers, who have learned by past experience that they can get high quality and just what they want. Can't here describe what I have but write for our large illustrated catalogue, giving breeding of herd, which you will see is the best.

JAMES FISHER, Eastman, Wis.

CHESTER WHITES

Jerry S. 13167 at head of herd, sired more prize winners at Iowa State Fair than any other hog making an exhibit. Guaranteed satisfaction and it is satisfaction that satisfies. Try me.

J. H. MAHANNAH, North English, Iowa

CHESTER WHITE BREEDERS

I have 5 service boars, 6 sows ready to breed and 30 spring pigs, as fine as I ever owned and the most prolific. Write me.

LEWIS BAKER, Christiana, Pa.

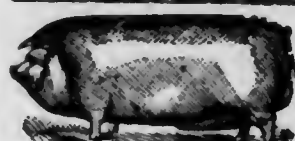
SPRING PGS CHESTER WHITES



Bred right, Fed right, Priced right, Come and see them, as good as any herd in Penna. Can please you.

J. H. YARNALL, Keltton, Pa.

EVERGREEN FARM Berkshires, Glits bred, ed by Baron Longfellow 8th, \$559, half brother to the World's Junior Champion.
GEO. EDDY, Malone, N. Y.



Chester Whites

I have them combining the best blood in Chester County. If you want the good old Chester that has made this county famous, we have them here that will please you. We breed and sell only the best. Write me.

L. WEBSTER, Keltton, Pa.

Primrose Herd Large English Yorkshires.

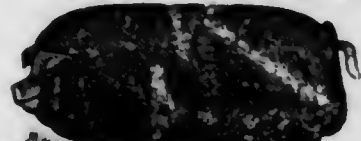
From Imported Stock. Second to none. Write wants.

A. A. BRADLEY, Frewsburg, N. Y.

CHESTER WHITES AND POLAND-CHINAS.

20 choice Spring Sows, open; 25 Fall Pigs, both sexes, and also some very fine yearling bred sows that are extra fine and were prize winners last Fall. 12 head Poland-Chinas from 8 to 12 months old. I never had a better offering in young sows than this.

C. R. CRESSMAN, Bursonville, Bucks Co., Pa.



POLAND-CHINAS

of Best Strains

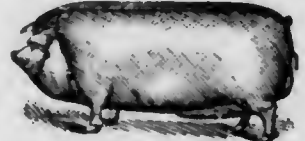
CHEA

Pigs by Mo. Black Mischief Maker 33711 and Siefker's Sunshine 101449. Dams are by 10 different noted boars. I have shipped to 19 states. Satisfaction guaranteed. Write for circulars and particulars before you buy.

A. F. SIEFKER, St. Charles Co., DEFIANCE, MISSOURI

Bursonville, Bucks Co., Pa.

GREENWOOD STOCK FARMS



Farmers and Breeders I now have a large stock, probably the best I ever owned, thoroughbred Poland-China and Chester White Pigs, 2 to 6 mos. old, sows bred, boars ready for service, all from prize winning stock. Guernsey and Jersey Cattle. Buff and Barred Plymouth R. Chickens.

Farms and Residence, Greenwood, Pa.
Address C. H. DILDINE, Route No. 1, Rohrsburg, Pa.

DOG, HOGS, PIGEONS, FERRETS, BELGIUM HARES, for sale all kind cents 44 page illustrated catalogue. C. G. LOYDT, Sayre, Pa.

BLOODED STOCK

would have to keep 400 of these poor producers. But he could get the same results with 21 cows like those in the better herd. Truly there is a large and vital difference between these two herds, and one that no dairyman can afford to overlook.

These estimates are conservative made from the facts known, and do not yet represent the widest extremes in Illinois dairy conditions. It is altogether probable that this poorer herd is kept at an actual loss, and quite possible that the better herd makes more money than is here credited to it.

Eighteen dairy herds in another part of the State were tested by this station. For one year, the average production of the best six herds was 280.5 lbs. butter fat per cow, and of the poorest six herds 172.7 lbs.

Counting the butter fat at 25 cents per pound, the best herds made an income of \$70.30 per cow, and the poorest \$43.18. Here is an average difference of \$26.95 per cow. In a herd of fifty, this would amount to \$1,347.50.

Granting that it costs \$32 per cow to feed the poorest herds, and \$40 per cow to feed the best herds, the net profit would average \$11.18 in the former, and \$30.13 in the latter. That is, every cow in the best herds earned nearly three times as much money for the farmer as did the average cow in the poorest herds. Which kind is the best to keep?

To return the dairyman a profit of \$1,000 per year, would require ninety cows like those in the poorest herds, but only thirty-four of the kind in the best herds. Thirty-four of the best kind at \$55 would cost \$1,870, but ninety of the other kind at \$35 would cost \$3,150, requiring an investment of \$1,280 more than for an equal herd of the best cows. It is easy to see that it would take more labor and more men to feed and milk ninety cows than it would to care for thirty-four. The ninety poor cows would consume \$2,880 worth of feed, and the thirty-four good ones \$1,360 worth—\$1,520 in favor of the good cows. Which kind is the more economical?

The average cow in the best herd makes an annual income of \$87.54, and at \$40 for feed, a profit of \$47.54. While the average cow in the poorest herd makes an income of \$35.51 and at \$32 for feed, a profit of \$3.51. Here is a difference in profit of \$44.03 per cow, and it takes 13½ cows of the one kind to make their owner as much clear money as one cow of the other kind. To make \$1,000 profit per year would require a herd of 285 cows like those of the poorest herd, or just 22 cows like those of the best herd. Which kind should the dairyman build up?

The estimate of these twelve herds take note of only the feed and the butter fat. The calf, the skim milk and the manure, will certainly pay for the labor and the interest on investment.

These figures of really representative dairy herds must mean something to the thoughtful farmer. The herd of low production and the individual cows that do not return the owner a net profit of \$12 or \$15 per year—and their name in Illinois is Legion—scarcely justify his investment of money, time and labor in

keeping them. A study of these herds shows that the economical thing to do is to sell the poor cows to the butcher as fast as they can be replaced with better producers. The latter can be accomplished either by more judicious buying or by raising the heifer calves of high-producing mothers, mated to a pure-bred sire having a line of such mothers in his ancestry.

This is not so difficult to do when once the dairyman sets his standard of a cow, determines definitely what kind of a cow he will buy or produce, and goes after that cow instead of taking something else that may be cheaper or easier to get. The greatest practical difficulty is in discovering which cows are poor and how poor they are. This is quite easily done—in just one way—by weighing and testing the milk of each cow often enough throughout the milking period to get a fair estimate of her worth. Scales and a Babcock test cost but a few dollars, and their use may easily lead to an improvement of the herd, that will add hundreds to the profit annually. Should not every dairyman ask (and answer) the question, "On which side of the profit line—and how far from it—is my herd and every individual in it?"

THE GREAT DUROC.

By Rossell Bros.

This bred of hogs a few years ago was almost an outcast. But today they are the pride of the breeder and farmer. This hog has the ability to make a pound of pork on as small a given amount of grain as any other hog, and quality unexcelled by any. The farmers of today want the hog that will make a weight of 200 or 250 at earliest age. The Duroc will make this weight in as small a time as any and still keep on growing and mature at from 600 to 800 pounds, and in some cases still more. For an experience last fall we had between fifteen and twenty rejected sows and boars that we fattened and they averaged 257 pounds at eight and one-half months old and did not take any extra care of them. This can be done with the great red hog by the farmers in most any locality. All we have to do is to give this hog a chance and he will show us. As the old saying, "I am Missouri, I have to be shown, the reds can show us." The demand for this great breed is increasing from year to year, and from coast to coast.

Among the breeders and farmers at recent sales in different states has marked that the Durocs are on the top shelf with any other breed. There has been several sales that has marked the Duroc to their high standing that they have today. Several sales have passed the \$1000 mark and in one instance one sow sold for \$1275—the highest mark in the Duroc history. There never was a greater demand for bred sows of this breed than has been the past winter. And last of all, from the packers' standpoint, the Duroc is a leader with them.

May the Durocs be long-lived, and the prospect will make things look red. Hurrah for the reds and for

Nebraska, which has done as much for the advancement of the Duroc as any State in the Union.

SOWS EATING PIGS.

For Blooded Stock.

Carefully watch and count the litter at each feed of the sow. If one of the pigs has disappeared and you cannot find it after searching through his nest, make up your mind the sow has eaten it, not an uncommon thing.

The cause of sows eating their pigs is an abnormal condition or appetite of the sow, a craving for something she cannot get.

This is easily remedied by feeding the sow all the fat salt pork she will eat. Even if the pork is salty rub still more salt over it when you feed it. One feeding is enough—the sow will eat no more of her pigs.

CAPON TOOLS



CAPONS bring the largest profits—10 per cent more than other poultry. Caponizing is easy and soon learned. Progressive poultrymen use **PILLING CAPONIZING SETS**. Postpaid \$2.50 per set with free instructions. The convenient, durable, ready-for-use kind. Best material. We also make Poultry Marker 25c, Gape Worm Extractor 25c, French Killing Knife 50c, Capon Book Free. G. P. Pilling & Son, Philadelphia, Pa.

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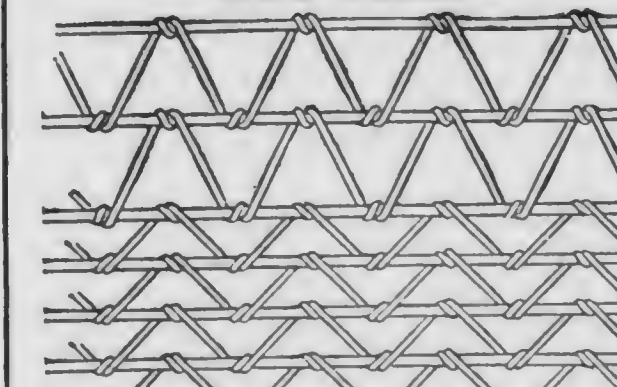
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THE FIRST Hartman Stockade Woven Wire Fence



Ever built was erected 17 years ago and is still in use as durable and strong as when first put up. The Hartman is a perfectly woven wire fence that is strong enough to keep in the maddest bull and fine enough to keep out the chickens. It is made of the best quality galvanized steel wire and contains much more material than fences more cheaply constructed. That's why it lasts so long. If your dealer doesn't handle it, write for catalogue and prices. Address: **GLEN MFG. CO., 136 Mill St., Ellwood City, Pa.** Also, Mfgs. Hartman Steel Picket Fence, Hartman Flexible Wire Mats and Glen Steel Mat.

The Utility of the Standard Bred Trotter.

(continued from page five)

the proper quality. How many of them, even those raised by farmers, have brought several thousand dollars each? If a farmer has been able to raise one of these he has got a mortgage lifter or a good sum of money to deposit in the bank. I don't advocate that all farmers should breed this stock; but they should if they have an aptitude for it, and don't want to go into it for gambling purposes (and most of them do not). You can use the colts on the farm when they are about two or three years old; if you want to run little errands, you can drive them and in that way you are developing them; and if they show any unusual action, or speed, or style, there is always some sharp man who keeps his eye on them and will pay good prices for them; and men like good horses. Our fairs are not successful unless we have the attraction of races. Man was created to admire, next to a beautiful woman, a beautiful horse. Kentucky is noted for its beautiful women and magnificent horses, and you will never find a Kentuckian whose admiration doesn't turn in that direction, and people from other States are much like Kentuckians in that respect.

In raising horses, it is just like raising any other kind of stock; the young stock especially should have good care and good treatment; they should be housed in the winter, especially over night; they should have good feed. I have found no forage that produces so much growth in the young as alfalfa hay; it is an indispensable thing to have on every farm; you must raise alfalfa and cowpeas or some other leguminous crop if you would keep up the fertility of your land; if you would raise good crops of corn, you must raise alfalfa, clover or some other crop. I think we are coming to the point where every farmer can raise alfalfa. If it can be raised so successfully on the white clay soils of Ohio, where the crawfish flourish, how much more successful should a crop of it be here in Missouri? The thing is to start out and sow it. It is not simply a good horse feed, it is a good cattle feed; it is a good sheep feed, and above all it is a good hog feed.

I might talk to you very much more about raising horses and raising colts about breeding them. The great law is, as I have stated, that like produces like or the likeness of some ancestor. There is a great deal in that "some ancestor." That is why pedigree is essential. Sometimes an animal will be produced like an ancestor which existed four, five, six or even ten generations back. I have known of horses that have been marked like their ancestors six generations off, even to glass eyes, when none of their progeny had been marked in this way before. This law of breeding is a most mysterious law—hence, you want pedigree. You want to know the history of the generations preceding the animal which you breed from. You want to be very careful. If you are going to marry you are careful. You study the history of the family with which you are going to unite. You want to know whether the men have been of

BLOODED STOCK

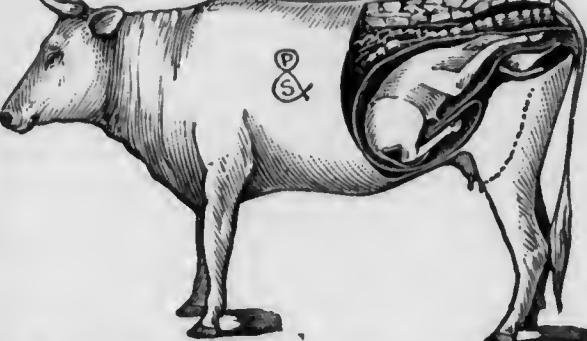
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Pilling Milk Fever Outfit—For Air Treatment as recommended by U. S. Department of Agriculture—sent Prepaid \$3.00—full directions.
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Our Veterinary Staff, composed of the best cattle specialists in this country, will answer cattle questions free of charge to our customers; veterinary advice to others, \$1.00.
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Value.....\$11.25
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good character, and whether the women have been of good character, whether there has been any weakness in the family. Another thing that we don't pay enough attention to and, that is, we want good mothers, good dams, of all kinds of stock. You have never seen a great man that did not have a good mother, a mother of ability, in some lines, either natural or acquired; and these young men who have not married should bear in mind that if they want their children to be an honor to them, they want to marry women with good minds and good morals and good ancestors and good physical development. Everything depends upon a good mother—every farmer knows that. I know it from the breeding of horses for the past forty years.

Developing the Pigs

Editor of Blooded Stock:

A great many people look upon scientific feeding with a sort of ridicule, and with much the same criticism that we have for what they term "book farming." We desire to call attention to some scientific ideas regarding the development of pigs. The buyer of blooded hogs very often says: "I do not wish to purchase a fat, 'pussy' pig." Now, he evidently has an idea, perhaps gained from practical experience, that such pigs are practically useless as a breeding animal, and as likely never will be a success. We all know that pigs from some sows fatten more early than from others, although both dams may represent the same breed of hog. In fact, they may be own sisters, or half sisters, and yet one will produce pigs that fatten readily, turning over the best part of the ration to the laying on of fat, while others on the same feed will grow longer and rangier, with heavier bone and stronger constitution. Of course, when this is a characteristic of the animal, it is more difficult to control the inclination to get fat, but nevertheless, it can be done.

A weakness invariably results from the feeding of too much corn. To

scientific men this is easily understood. They will tell you that it requires protein in some form of the food to make bone and muscle, tendon, hair, hoof, etc., and carbonaceous material or feed, to make fat. The heart of a grain of corn represents protein in general terms, and the harder, starchier part of the grain is the carbonaceous, or fat-producing material. In the grain of corn there are about ten times as much of the one as there is of the other. Hence, what could we expect of pigs that receive corn and water? Simply, that they would produce more fat than bone and muscle. As a result, before the pig is half grown, it is fat enough for the market, and absolutely unfit for breeding purposes. And yet in selecting an animal from your herd about one-half the people want that kind. If it is a gilt you can only expect a small and weak litter, if still in high flesh and rations have not been changed to slop, etc., for her and her pigs, giving her an opportunity to develop some bone and muscle, she will go down in her feet and do it anyway.

It is not more important on dividing the pigs at weaning time according to sex, than it is according to their inclination to fatten. Those inclined to be thin and leggy should have corn in order to fatten them and "feed them down." Those inclined to fatten should have less corn even while nursing their mothers, and should have a mixture of shorts, oil meal, cotton seed meal, pea meal or anything that will make a good slop, and give them the necessary protein. Bone meal is a valuable addition to the ration. It is of great value for pigs of this age to root, although they frequently create considerable loss by so doing. At certain seasons of the year it is not difficult to allow them to run on a clover pasture or a pea crop.

We cannot over estimate the value of feeding the proper ration if we desire to develop the pig properly. Too many breeders feel that he is for sale anyway, and their sole object is to get him in the most presentable condition. The unsatisfactory results are often more injurious to the

BLOODED STOCK

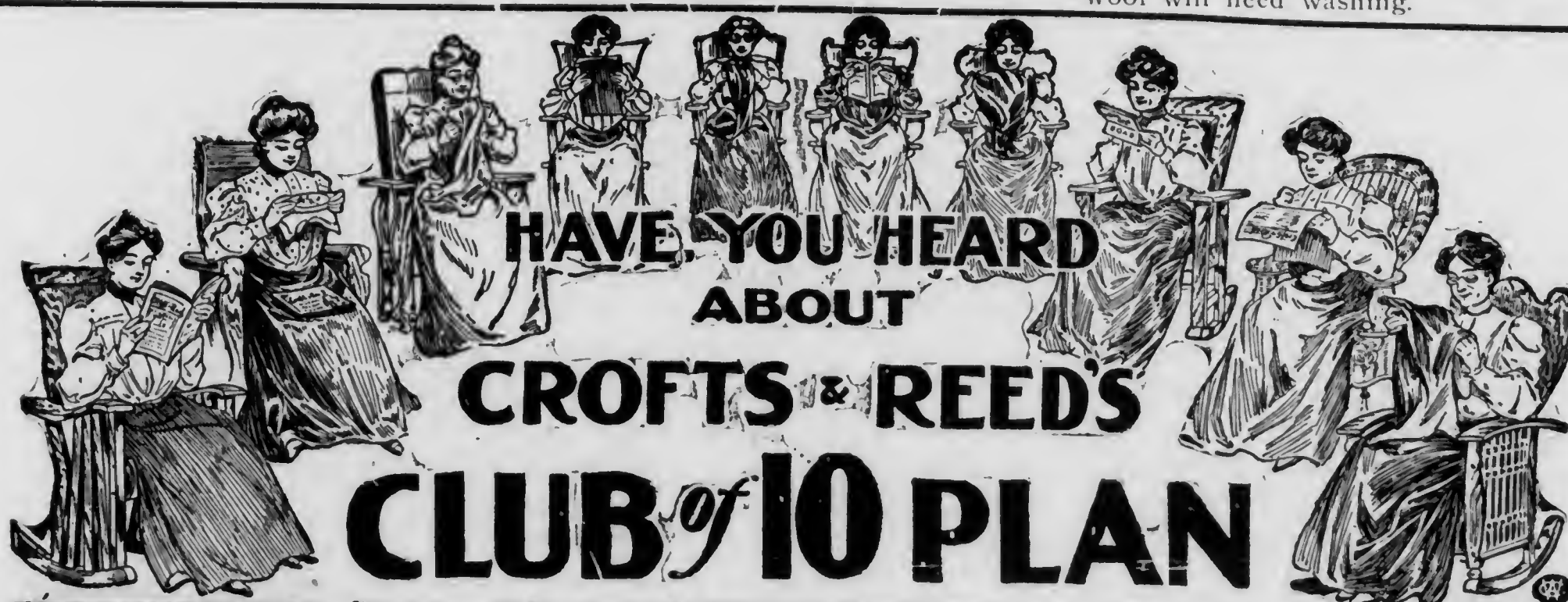
Selling Hogs at Private Sale.
(continued from first page)

accuse you of misrepresentation. One customer well pleased will send another and come again himself. No advertising does as much as the good hogs sent from a farm.

In a word, courteous treatment, prompt attendance to correspondence, comprehensive records, honesty and fairness in business transactions and you cannot help but succeed—Farmers Advocate.

Walter J. Quick,
Gosport, Ind.

It is estimated that between 75,000 and 100,000 head of sheep will be sheared in the country tributary to Lewiston, Idaho, this season. The wool will average nine pounds to the sheep. J. D. C. Thiessen has commenced shearing his band of 14,000 on the Upper Clearwater. No wool has been contracted for in this section, which is unusual, but growers expect better prices than they received last year. Very little of this wool will need washing.



For Farmers' Wives

Here is an easy way for farmers' wives to get beautiful, useful, up-to-date home furnishings such as shown herewith—without any cost. We call it our "Club of Ten Plan" which means that by getting nine of your neighbors to join you in forming a "club of ten" to buy the household necessities you use and need every day, such as teas, coffees, soaps, baking powders, flavoring extracts, spices, in fact nearly all your groceries, direct from us—the manufacturers—each member can get these

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Our prices for such groceries are no more, than you are now paying your storekeeper, and in many instances less, while the quality we guarantee equal to any goods sold for same money. In fact, we offer to send them (also the premium) and let you use what you wish for 30 days. If they are not satisfactory you can return them at our expense and your money will be refunded in full. Send for particulars on our Club offer. Thousands are buying from us in this way and furnishing their homes without cost.

If you do not want the premiums ask us about our "factory to family" plan by which you can buy these same high-grade household supplies at half price. It is a plan that

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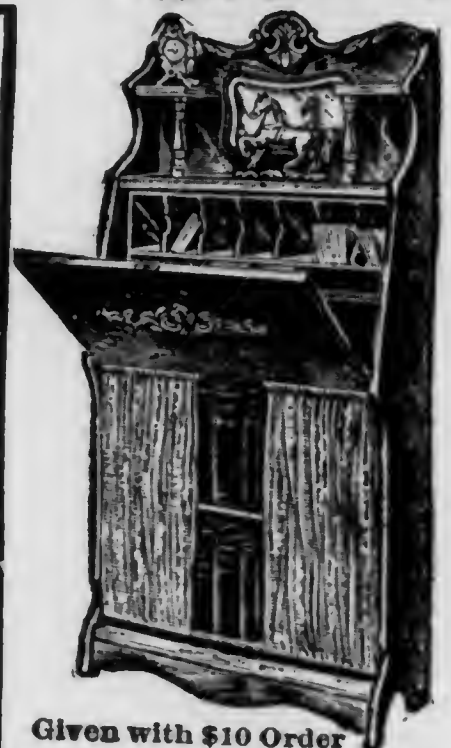
every few weeks. For example, we sell a Pure Cream Tartar Baking Powder which costs you 25c at dealers for 12½c and guarantee it equal to any sold at twice our price. Soap which you pay 5c a cake for we sell at 2½c, and so all through our list of about 140 different articles. You can save one-half on nearly everything you buy.

Send For These 2 Books



they explain all our money-saving plans; show pictures of both goods and premiums and prove the folly of paying double our prices for things you must buy nearly every day. One of these books tells "How the Farmer's Wife can Save \$10.00" in a few weeks—the other "How she can Furnish Her Home without Cost." They are free for the asking. Send for them today and begin to save by our direct buying way. It pays.

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Crossing Breeds

There is a strong tendency among many farmers in breeding stock to mingle the blood of different breeds together thinking thereby to get stock with the desirable qualities of all the breeds combined in the offspring. The many failures for each success in this mode of breeding makes it so unreliable that the most experienced breeders and stock raisers have discarded this manner of breeding and breed for a definite purpose, and to eliminate the faults in their herds or flocks select an animal of the same breed strong in the parts where their stock is deficient. In this way they are able to secure the benefit of the best thoughts and experiments of the breeders of their particular breed that have given much thought, study, time and money to perfect a breed that closely approaches their ideal. And by culling closely, selecting and mating judiciously they have after years of ceaseless effort so perfected the tendency to produce a certain type that even when crossed on stock of mixed breeding the offspring strongly shows the breeding of its pure-bred ancestors. Cross-breeding has a tendency, a very strong tendency to revert back in type and form to remote ancestors. Although the first cross between pure-bred stock often produces superior offspring owing to the strong blood lines on both sides striving for the mastery, the after-crosses lose this tendency, as the mixed breeding does not hold a superior tendency in any certain breed or type and a series of misfits is usually the result after the first generation. The man who selects the type and breed best suited to his needs and environments and then breeds and feeds with these environments in view, breeding in line from stock strong in the type he is aiming to perfect, is sure to succeed; while that man who has no definite aim in view except to get as many dollars for the immediate crop, unmindful of future values, is not the man that reaps the benefit of what others have sown, but on the contrary each succeeding year his stock deteriorates until, as he himself will say, "My stock is run out—I am obliged to buy stock for a new start. Times are hard. I have a notion to buy that animal of Mr. Doubtful. He is a good animal and a cross between two of the best breeds I know, and I can buy him for less than half I would have to pay for a pure-bred pedigree sire, and he ought to breed well, for both sire and dam are splendid animals of their respective breeds." So he tries another cross to mate on his scrubs in the hopes of breeding up with little cost. This is an extreme case. Let us look closer home and see what our neighbors are doing who are trying this cross-breed method. I have in mind a neighbor: He is a generous feeder, takes pride in marketing good stock, but he keeps his brood sows of one breed and crosses with another breed and keeps the old sows as long as they remain profitable. One year before he intends to dispose of them he breeds them to a sire of the same breed as the dams, so as to obtain a litter of pure-bred pigs from which to select dams for again cross-

BLOODED STOCK

ing with a male of a different breed. He does not use his cross-bred pigs as breeders but markets them. He has good stock and maintains the quality by selecting his best gilts and using a good boar. But there is a tendency and almost irresistible desire to keep some of these choice cross-bred females for breeders. Another I have in mind: After crossing the Poland on Berkshire and this cross on Chester and again on Duroc-Jersey, says he has the poorest lot of pigs he ever raised.

Should we profit by breeding in line we must keep in mind that like begets like or similars only when they are line bred and not when cross-bred, and by making the environment and care the same, as near as possible, to that which that particular breed has become accustomed in order to breed it up to its present degree of perfection. The time is fast passing when the advocate of the scrub stock will stand up and say that scrub stock that can hustle and get its living from among the forest leaves and scanty dry grass, and if it manages to live throughout the storms of winter and in the spring be still able to stand and slowly travel around seeking for a few blades of grass in early spring, will bring profit to its owner. It is not that blooded stock has a better or harder constitution to stand privation, but that it is better able to assimilate its feed so that when liberally fed it is able to make more pounds of gain from a given amount of feed, and by better surroundings and care is yet again able to add another percentage of gain, besides still another percentage of gain by being ready to go on the market in from one-third to one-half the time needed to make the scrub equal in weight and sell at a less amount per hundred than his well-bred brother. Stop these leaks by better care and surroundings, by better and more economic feeding and by better and more judicious breeding. Do not try to tear down by cross-breeding indiscriminately what the breeders of these pure-breeds have been years in building up. If you find that a certain breed of stock does not thrive and come up to its best with your method of care and feed, discard it and select another that will thrive under your methods and care, or else change your methods of feeding and care. But always remember that a breed comes to its highest and best development when it has liberal feed and the best of care. Some that believe this true of the cow, sheep and hog think differently of the horse, since its sphere of usefulness lies in a different direction. But it is equally true of the horse, but the kind and quality of the food of the colt and horse should be such as to produce the desired result. No horse was ever any tougher or could stand more work or go faster by "roughing it." The broncho is not a rougher horse than are the Morgans, nor fleetier than the standard bred nor more enduring than the thoroughbred. To make corn the principal feed of a spirited colt of a roadster or coach breed of horses would surely dull his spirits and action by overloading it with fat. But when fed a properly balanced ration, with a full amount of muscle and bone forming food which fills its veins with rich am-

bitious blood, making it full of life and vigor, it makes him strong to endure, spirited to travel and well muscled to draw. It is true that our large draught horses need and can assimilate a more carbonaceous feed, since weight is necessary in order to draw heavy loads, but for speed it becomes a hindrance rather than help. No one would think of feeding a little Jersey cow the same food in the same proportions to make her give milk rich in butter-fat as he would feed his steers of the beef breeds for the butcher. If your method of care and feeding does not procure good results with the breed of stock you are raising, then change your methods or secure another breed that will thrive under these conditions.—F. E. Rutter in Swinebreeder.

A REMEDY THAT CONTINUES.

One of the commonest ailments of horses is spavin, a growth on the hock joint, with which all horse owners are familiar. It seems to come without cause, and greatly impairs the value of the animal, both for market and service.

Spavin, to many horse owners, is an ailment greatly to be dreaded. They regard it as something almost incurable. Others who have had more experience, regard it but lightly. There is no chance for its long continuance without notice. And if treated promptly, it can easily be cured by that standard stable remedy, Kendall's Spavin Cure. The cure will be permanent and no sign of the injury will remain. Even cases of long standing are often cured. It is possible that all, except the very oldest and stubbornest, will yield to this treatment. There are also a number of other ailments of horses, consisting of unnatural bonygrowths, which would, from their nature, yield to the same sort of treatment. We mention ring-bones, curbs and splints. All of these do, as a matter of fact, when taken in time, yield readily to a proper use of Kendall's Spavin Cure.

It is a matter of remark that this great remedy should be so universally looked to by horse owners and that it should have continued so popular for so long a time, also that it should be so much better known than other remedies compounded for the same purpose. The only explanation lies in the efficiency of the remedy discovered by Dr. Kendall many years ago. It is so perfectly adapted to horse needs in the treatment of the ailments mentioned, that horse owners in general began using it. Veterinarians also began to use it in their practice. From these, other veterinarians adopted it and other owners were educated to keep it on hand for emergencies. And so it happens that now with the second generation of users Kendall's Spavin Cure is probably the nearest a universal horse remedy of any thing in the world. We have no hesitancy in saying that the remedy, as well as the admirable little book, "A Treatise on the Horse and His Diseases," which may be had free from druggists or the Dr. Kendall Company, should have a place in the stable of every horse owner.

Weaning Pigs

For Blooded Stock.

Weaning pigs will soon be the order of the day with the hog breeder. Much care is necessary here not to stunt the pig or stop its growth. I have weaned pigs at every age up to where they naturally wean themselves, and have come to the conclusion that pigs will do best that are allowed to run with the sow until they naturally wean themselves.

At about three weeks of age the little fellows will begin to look around for feed. At this age a pen should be provided for them where they can be coaxed and given a little fresh milk—it takes very little at first—after they have once tasted the milk they are easy to call to their feed. Corn should be constantly kept in this little pen or yard where little pigs have free access to it all day long. Milk or swill should be fed a little at first and increased gradually daily. It is all right to give them all the fresh clean swill they will drink up clean at each feed. Never feed little pigs anything sour or feed them so much swill that it will stand in the troughs and sour.

If the old sow is allowed to get in this pen once a day to lick out the trough and pick up the dirty corn, so much the better. Or better yet, if you can allow piggy to get into the corn crib and help himself and scoop out the corn he has dirtied to the old hogs, thus piggy has the best of clean, sweet corn and will thrive marvelously.

Feed piggie this way until you see the sow is dried up, then remove her and piggie is weaned and never knew it. Meissner Bros.

DIRECTOR'S MEETING.

National Poland-China Record Association.

This association is the consolidation of the Ohio Poland-China Record Association and the Central Poland-China Record Association, which union was formed in January of this year. This was the first meeting of the directors and was called for the purpose of adjusting all matters relative to the interests of the Poland-China breeders. The meeting was held at Winchester, Ind., Friday, May 25th, the entire board being present, consisting of L. C. Nixon, Lebanon, Ohio; Adam F. May, Flat Rock, Ind.; M. A. Klever, Bloomburg, Ohio; W. O. Canaday, Anderson, Ind.; J. H. Lackey, Jamestown, Ohio; Tom Lindley, Russiaville, Ind., and W. H. Morris, Indianapolis, Ind. Arla M. Brown, Secretary, had all matters to come before the board in good form, so that within fifteen minutes after they reached the office, they were called to order by the chairman and work commenced. Considering the magnitude of the work of merging these two records, it was remarkable how few complications were presented, and several of those taken up were tabled as matters not within the jurisdiction of the board. Mr. Brown is to be complimented on the able manner in which he handled the affairs of the association. His report and books showed a great increase in the business of the association,

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and the number of shares of stock sold since the consolidation indicate that the change is one which is duly appreciated by Poland-China breeders. The office of the association at Winchester, Ind., is a large, pleasant room, opposite the court house, a pleasant place, to which all Poland-China breeders are invited. The office force was busily employed on pedigrees which go to press at once, the board having let the contract for printing at this meeting. The volume to be issued about January, 1907, will contain from five to seven thousand pedigrees, printed in a neat diagram form. The members of the board were well satisfied with the business of the past few months, especially the sales of stock, which increases, if continued at the present rate, will make the largest membership of any association in the United States. Breeders of Poland-Chinas wishing information regarding pedigrees should correspond with Secretary Arla M. Brown, Winchester, Ind.

PENNSYLVANIA DAIRY UNION PLANS.

At a recent meeting of the officers and directors of the Pennsylvania Dairy Union, preliminary arrangements were made for the next annual meeting of the Union, which will probably be held in Harrisburg in January next, definite date to be announced as soon as details can be arranged. It is the purpose of the officers to arrange for a dairy exhibition in connection with the convention, this exhibition to include dairy and creamery butter, cheese of various kinds, certified, pasteurized and market milk, dairy machinery, etc., in fact to make the exhibit as instructive and interesting as possible.

Recognizing that Pennsylvania ranks second in the Union in the value of its dairy business, and probably first in the diversity of its dairy products and interests, the officers believe Pennsylvania should have a dairy convention and show, not excelled by that of any state; if all who are interested will help, we will have one.

The purpose of the Union is to advance in every possible way the dairy interests of the State by united effort of those who represent the dairy interests, whether they be milk producers, breeders of dairy cattle, farm or creamery butter makers, creamery managers, milk dealers, commission men, or any others who are interested in the dairy business, the work of the Union will be helped and will prosper in proportion as those who may profit by it help in the larger work which profits all as well as the individual.

The officers will be glad to receive suggestions from those who are interested. The payment of the annual membership fee of one dollar, which should be sent to M. E. Reeder, Muncy, will help to provide funds for the necessary expenses. Any person or firm interested in the dairy business in any way, is eligible for membership for one year on payment of one dollar.

While the financial resources of the Union are limited, it is expected

that the funds secured from membership and other sources, will be sufficient to provide for some prominent speakers and at least moderate premiums for the several classes of exhibits at the next convention.

It was voted to recommend that the Dairy Union try to secure the passage of proper laws regarding the sanitary conditions of all places where milk and its products are handled, also for a minimum standard of quality of milk and for the safe guarding the accuracy of the Babcock test.

H. E. Van Norman, Pres.,
State College, Pa.
W. E. Perham, Sec.,
Muncy, Pa.

THE PILLING POULTRY AND CATTLE INSTRUMENTS.

The season is now here when every owner of live stock should be prepared for any emergency that may arise. The live stock of the farmer is one of his most valuable assets and if it is not taken care of when it is sick or injured he is liable to lose their use while sick and they are also liable to die. All progressive stock owners are using the Pilling Instruments. We advise our readers to send to George P. Pilling & Son, 2224 Arch street, Philadelphia, Pa., for any of the three following books. These books will be sent to our readers free of charge. They treat on the following three subjects:

Artificial Impregnation of Mares.
Milk Fever and other ailments of Cattle.

Complete Guide for Caponizing.

These instruments are "Easy to Use." Any farmer or live stock owner, or their employee can easily use them, for it is not necessary to have veterinary skill because these are made for the farmer to use himself.

Double Power Mill Co., Appleton, Wis.
Ask for Book about our 2 Wheel Mill.
Our self fed roller milled single and double roller milled and our Answer Book.



\$750.00 COCK
You can get an elegant 8x10 color picture of this grand bird and 3 months subscription to the American Fancier for 25c. This makes the picture absolutely **FREE**. The American Fancier is the weekly paper needed by every lover of poultry and fanciers. Send quick before the supply is exhausted.
AMERICAN FANCY,
304 Havemeyer Bldg.
New York City



Feed Stuffs

Turning now to cattle foods we find that some of them may be supposed to be related to the appetite of the animal in much the same way that eggs, cheese and meat are to the appetite of men. To this class would belong such feeding stuffs as cotton seed meal, linseed meal, gluten meal and buckwheat middlings. Cotton seed meal is richer in protein than cheese. It contains 42 per cent of protein while cheese has but 28.2 per cent. Linseed meal usually has 32 per cent of protein while eggs have but thirteen per cent.

Protein is known by other names. Because it contains nitrogen, it is called nitrogenous substance. Because the protein compounds resemble the white of an egg they are called albuminoids.

Fat. The meaning of the word fat in relation to cattle feeding is the same as when used in ordinary conversation. The fat found by the chemist in corn meal, clover hay and other feeding stuffs is very similar in composition and in physical properties to the animal fat, lard, butter or tallow. The quantity of fat in the various feeding stuffs differs widely. Of the total weight of the seeds of flax and the cotton plant, fully one-quarter is oil, while straw and green fodder have relatively very little. The fact that nearly all of our fodders contain some fat is the one that is important to remember.

Carbohydrates. Both protein and fat are essential constituents of the diet of animals and men, but these two factors together do not constitute a complete daily ration. The appetite calls for some starch food. In the case of men this is usually supplied by potatoes or some other vegetable. One hundred pounds of boiled potatoes would furnish 22.3 pounds of starch. Honey and syrups are composed almost entirely of sugar. In the animal economy it has been pretty clearly shown that the sugar and starch serve as sources of energy and that the two are of approximately equal value. Stock foods are rich in starch and sugar. The stems and leaves of forage crops are made up of starch in some of its many forms. Sometimes in the economy of the plant, this starch is transformed into a woody fiber needful to the plant to hold it upright and give it a definite form resistant to wind and the action of the elements. When the plant is cured for hay this woody fiber forms part of it and when fed to the cow or sheep is partly digested though never entirely digested. Even the woody fiber has some value in stock feeding. The chemist calls it crude fiber. Sugar dissolves readily when taken into the mouth and is quickly absorbed through the walls of the stomach and intestines. Starch is acted upon by the saliva and by the juices secreted by the stomach and intestines. The result of the action of the juices upon the starch is conversion into a form of sugar which is absorbed. The crude fiber, as far as it is digested, is also converted into a similar sugar by the action of the liquids of the stomach and intestines.

Because the starch, sugar, crude fiber, and other materials not containing nitrogen are similar in composi-

BLOODED STOCK

tion and converted by digestion into this form of sugar, the chemists have agreed to call the whole group carbohydrates. It is to be noted at once that the carbohydrates include a great many groups of dissimilar substances, alike in one respect alone, namely, that, when digested, they supply the body with a material either sugar or compounds similar to sugar in solubility and chemical composition.

Ash. The ashes remaining when the feeding stuff is burned have a definite and essential part to play in the nutrition of animals. There is usually no lack of ash, although sometimes in case of young animals fed largely on grain, the deficiency of ash manifests itself in a weak bony structure and general lack of thrift.

Digestibility. Cattle and sheep have four stomachs while the horse and the pig have but one. The animals that chew the cud are thus provided with digestive apparatus especially fitted to handle coarse fodder like hay and straw and extract from it as great a share as possible of the nutrients contained. The first stomach is simply a large reservoir into which the partly chewed fodder passes when swallowed, there to remain for an indefinite period to soak in the slightly acid liquids until again brought to the mouth for remastication. Even when swallowed the second time part of the "cud" returns to the first stomach. By this mechanism a thorough grinding of the food is assured. The material then passes to the third stomach where a set of hooks and a tough lining membrane again grind the food, acting upon it much as do the pebbles in the gizzard of the fowl.

From the stomach the food passes directly to the fourth or true stomach, the organ which corresponds exactly to the stomach of the horse and pig. The food comes to the stomach wet with saliva, softened and ground fine. The saliva converts a small part of the starch of the food into a kind of sugar. In the stomach the gastric juice converts part of the

protein into a soluble form. In the stomach, too, part of the sugar may be absorbed and go directly into the circulation.

From the stomach the food passes into the small intestines. Here, after passing along in a few inches from the stomach it is mixed with bile which comes through the bile duct from the liver. The contents of the stomach are acids, the bile is distinctly alkaline. Along with the bile, though discharged into the intestines through a different tube, comes a juice, perhaps the most important in its functions of any of the digestive fluids. This is called the pancreatic juice, a secretion of the pancreas.

It is the function of the bile to act upon the fats in such a way as to fit them to be absorbed. Just how it accomplishes this end is not fully known. Possibly it emulsifies them, that is, divides them into minute particles which are held in suspension and which may be absorbed. Next, the bile seems to exert an antiseptic influence on the contents of the intestines preventing decay. Third, the bile acts as a partial lubricant. Fourth, it prepares the partly digested food for the action of the pancreatic juice. Among the functions of the latter fluid possibly the most important, is the digestion of the protein. It converts the protein bodies into simpler compounds which are soluble and therefore capable of absorption. Next it transforms starch into sugar and other soluble bodies. Third, it breaks up the fats into glycerine and fatty acids.

There are juices secreted by the walls of the intestines. They aid in digestion largely by converting the carbohydrates into a form of sugar in which form they are absorbed. The whole aim of digestion is to make soluble the food materials eaten. They are therefore ground by the teeth then soaked in a succession of acid and alkaline liquids that, combined, act upon all of the food elements, rendering them soluble.

Notwithstanding the elaborate



SEND 3 PEDIGREES FOR RECORD AND \$1.00. Will Register any breed Horses, Cattle, Sheep, Swine once at this rate to show you our way and **Save Your Dollars, make lasting friends, patrons, members.** Write us of your business fully. Save 40 per cent. in fees alone. We send you complete information free for asking. **U O to know what others know. Memberships, all departments, only \$5.00. Lowest Fees.** We will exchange memberships with any other Association at par value free. Now consolidate your business with us. Every breeder sending \$1.00 as above this month will also get this paper free to January 1, 1907. **Be Prompt To-day.** International Consolidated Record Association, Penn Yan, N. Y. Wear badge pin--\$1.50 per paid.

ABERDEEN-ANGUS CATTLE BUY A WINNER—A MARKET TOPPER

The Angus cattle have captured more firsts and championships at the great fat stock shows than all the other breeds together. Why? Because they require less feed, feed easier, carry a maximum of the high-priced meats and a minimum of the cheaper cuts and offal, and will invariably outsell cattle of other breeds. We have them for sale of the most popular breeding. Our prices are within the reach of all. We solicit your correspondence and invite you to come and see our stock.

Meissner Bros., - Reinbeck, Iowa.

BLOODED STOCK

those of the American Jersey Cattle Club by over 2,300.

The growth of membership was extraordinary, 193 new members being admitted, bringing the total number to about 1,500. The receipts of the office were \$36,188.77, and a net balance of \$20,149.16 had been turned over to the treasurer.

Important amendments to the by-laws were adopted, including the rules for Advanced Registry. A provision was adopted requiring all persons registering cattle to keep a private herd register showing the date of service, name and number of the cow served, name of bull used, and the date of calving and the sex and color of the calf.

Appropriations were made of \$4,500 for prizes for A. R. O. butter records; \$3,500 for prizes at fairs, and \$500 for the National Dairy

Show.

Hon. O. U. Kellogg of Cortland, N. Y., was elected president, and W. A. Matteson, Utica, N. Y., R. M. Hotelling, San Francisco, Cal., F. B. Fargo, Lake Mills, Wis., F. P. Knowles, Auburn, Mass., were elected vice-presidents. A. A. Cortelyou, Somerville, N. J., T. A. Mitchell, Weedsport, N. Y., and W. B. Barney, Hampton, Iowa, were elected directors for two years.

Superintendent M. H. Gardner, Delavan, Wisconsin, Treasurer Wing R. Smith, Syracuse, N. Y., and Secretary-Editor F. L. Houghton, Brattleboro, Vt., were re-elected.

It was voted to hold the next meeting at Syracuse on the first Wednesday in June, 1907.

F. L. Houghton, Sec'y.,
Brattleboro, Vt.

equipment for digestion furnished by nature, it must needs be that part of the protein, carbohydrates and fat taken in the mouth in the form of hay and grain, must escape digestion. As a matter of fact little more than half of some of the valuable nutrients of the forage crops are absorbed and become really useful to the animal.

ANNUAL MEETING OF THE HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA, SYRACUSE, N. Y., JUNE 5, 6, 1906

The twenty-first annual meeting of the Holstein-Friesian Association of America was called to order by President A. A. Cortelyou of Somerville, N. J., at the City Hall, Syracuse, N. Y., June 6th. There were personally present over two hundred members and four hundred and ninety-two represented by proxy.

President Cortelyou in his opening address spoke for half an hour reviewing the work of the Association and the great progress of the breed and outlining future plans and recommendations. At its close he was warmly applauded and the audience rose to its feet in a popular testimonial of his address and services.

Copies of this address, in full, are being made ready to be sent to all interested.

The report of the treasurer, Wing R. Smith, was received with much interest.

Malcolm H. Gardner, Delavan, Wisconsin, presented in detail the report of the workings of his office of superintendent of Advanced Registry, including a pamphlet containing a list of the awards of the \$4,250 prize.

Mr. Gardner said in part: During the year just closed our breeders have had 1,614 cows under test for a period of seven days, and many of these cows for a longer period. Of the 1,614 cows, the tests of sixty-nine were begun more than eight months after freshening; and the results fully sustain the reputation of our breed of cattle for holding out well. The remaining 1,545 cows and heifers of all ages produced, during a period of seven consecutive days, 581,959½ lbs. of milk, containing 19,701 1-3 lbs. butterfat; thus showing an average of 3.39 per cent fat. The average weekly production for each animal so tested was 376.7 lbs. milk containing 12¾ lbs. butterfat; equivalent to 53.8 lbs. milk, or over 26 quarts, daily, and nearly 15 lbs. of the best quality of butter per week.

The organization of testing associations in Canada and Wisconsin, for the improvement of the common dairy cattle of the country, will, no doubt, be followed by the organization of such associations in the other dairy states; and the interest in accurate testing, so awakened among farmer dairymen, can not but be of great advantage to our Association which has long been the leader in such work.

The report of the secretary, F. L. Houghton, Brattleboro, Vt., showed the largest business in the history of the Association. Certificates of registry and transfer to the number of 25,175 had been issued, exceeding

EVERY DAIRYMAN NEEDS THE

Pilling Tuberculin Test

The greatest scourge of the dairy herd is tuberculosis, one affected cow will surely contaminate the whole herd.

Are your cows affected? Sure and easy detection, by the Pilling Tuberculin Test.

Easy to use. You can do it. Absolutely no danger using the Pilling test; does not interfere with flow of milk or health of cow. Price with full directions, complete outfit serum for 10 cows, \$5.00 and \$1.25 for each additional 10 cows. No experience necessary. **Illustrated Booklet Free.**

GEO. P. ILLING & SON No. 2224 Arch St. PHILADELPHIA, PA.

FOR SALE

4 ABERDEEN-ANGUS BULLS 4

They Have Size, Bone and Quality

A few fall boars, best of quality and as good Poland-Chinas as the country can produce. They are all sired by the famous Sunshine, 83243. They are strictly herd headers and will be sold for half what such pigs generally sell for. Write.

JOHN MEISSNER, REINBECK, IOWA

Berkshires and Guernseys

ALDORO FARM ROSSTON. PA.

Offers a choice lot of young sows bred to farrow at about 12 months old at \$25.00 and \$30.00 each. These are out of royally bred stock and are genuine bargains. Also two young boars ready for service at \$20.00 each. We have a few choice Guernsey bulls old enough for service at \$35.00 to \$60.00 each.

VETERINARY DEPARTMENT.

C. D. SMEAD, V. S., Editor

Professional advice given free to all subscribers through this department of Blooded Stock. Always describe symptoms, age, etc., as accurately as possible. Whenever you want prompt personal advice by letter and not for publication enclose One Dollar (\$1.00) fee. To derive the greatest benefits from this department preserve regular files. Always send your full name, post office, county and state with each inquiry direct to Blooded Stock, Oxford, Pa.

Chicago, Ill., May 17, 1906.
Blooded Stock, Oxford, Pa.

Gentlemen:—A few weeks ago I received at the farm some very fine sows. On their arrival I found their eyes running and every morning full of matter, also a cloud appeared across the whole eyeball—more in the form of a film over the eye. Some were completely blind. What is the trouble and the best remedy to use? Have been using boric acid and water.

D. D. Griffiths.

Answer—Your sows are afflicted with either an acute form of ophthalmia, as the result of a cold, or else they have an epidemic eye disease which made its appearance in this country about six or seven years ago and has prevailed more or less ever since among horses at various times of the year and in various localities. Within about five years it has become quite common among cattle in the Middle West, and within the past two years has prevailed among the cattle of the Atlantic States. About two years ago sheep in the various localities of Ohio, Pennsylvania and N. Y., have been afflicted—many of them becoming totally blind for several days. And now within the past year swine are being afflicted with the same. It comes on suddenly, an animal being apparently well on one day and one or both eyes badly inflamed over the cornea the next. Its duration is usually about ten days, when, if its effects have not left the optic nerves in too weak a condition, recovery takes place.

Treatment—The first thing should be to place the animal in a semi-darkened stable and feed upon a laxative diet. When possible bathe the eyes with warm water made brackish with salt. Then use a little of the following eye lotion: Compound of 40 grains each of acetate of lead and sulphate of zinc, fluid extract of belladonna 2 drachms, sulphate of morphia 10 grains, extract of witch hazel 2 oz., clean rain water sufficient to make one pint. Sop the eyes in this after the bathing with the salt and water. In a bad case use several times per day, once or twice in a mild case.

C. D. Smead, V. S.

W. H. Creswell, Cedarville, Ohio, writes that he offers this year something worthy of attention. One litter out of Dakota Chiefess, sired by old Dakota Chief, sired by Standard Sunshine; another out of Miss Climax, and sired by Correction, he by A. H. Perfection; others by Ohio Sunshine, Handsome Sunshine, by Black Sunshine. Trade last year very satisfactory—shipped to eight different states. We aim to ship none but the best—no culls at any price.

BLOODED STOCK

KEEP YOUR HOGS FREE FROM PARASITES.

Clark M. Drake, of the New York Tribune Farmer, describing Hill Crest Stock Farm of H. B. Harpenning, a well-known breeder of Berkshire hogs, says: "The herd is not allowed to be overrun by lice. The free use of Zenoleum prevents parasites from preying on them." Zenoleum is \$1.50 a gallon, express paid, and can be secured of the Zenner Disinfectant Company, 49 Lafayette Ave., Detroit, Mich. Their "Veterinary Adviser," a wonderful little book, is free for the asking.

ROUND-UP.

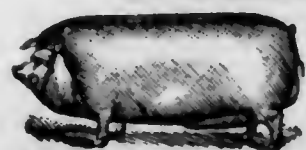
Nearly six hundred persons attended the great annual "Round-up" which occurred at the Auditorium Hotel, May 26, 1906, given by White Class Advertising Co.

The entertainment the following day was likewise a success. Five large tally-hos took the 200 people to the establishment of Crofts & Reed, manufacturers of soap, grocers' specialties, etc. They conduct their business on the "factory to family" plan, and they gave us a great exemplification of the value of advertising, as their business has been built up through advertising and selling direct to the consumer.

From there we were taken to the great mercantile establishment of Sears, Roebuck & Co., where a splendid dinner was served, after which we were shown through this wonderful institution and given practical illustrations of the modern methods of conducting mail order merchandising, where added proof was given of the value of advertising, because their business is conducted entirely on the consumer direct plan.

White Class Advertising Company deserves much commendation for the way they made this round-up a success. The friendly relations created by the bringing together of the advertiser and publisher should do much good, and every one present feels greatly indebted to Frank B. White, the President of the company.

Bargains in Poland-Chinas, Berkshires & Chester Whites



I now have a large stock of probably the best I ever owned. Cannot tell you all here, but I have Boars and Sows, all breeds, 2 to 6 months old, mated not akin; sows bred and ready for service, Guernsey Calves and Registered Scotch Collie Puppies. Write for prices and free circular. This stock must go and will be sold. M. B. Turkey, Barred and White P. Rocks, Brown Leghorns for sale.

P. F. HAMILTON, Cochranville, Pa.



OAKVIEW HERD —OF— POLAND-CHINAS

I have the best Poland-Chinas now for sale that I ever owned. 30 Head of March and April Sows sired by "Ohio Sunshine," bred to farrow in April. They are large and strong boned. Choice Aug. and Sept. pigs of both sexes. Spring boars all sold. Write for particulars.

W. H. CRESWELL, R. 3, Cedarville, O.

SHORT-HORN BULL CALVES

Chester White Pigs and Eggs from pure bred White Plymouth Rock Chickens. \$1.00 per 15.

JOS. T. FLEMING, Belleville, P.

The Wisconsin

HERD of DURO & JERSEYS

Have for sale 100 registered pigs of February and March farrow. Are bred from the most noted and up to date strains of prize winning stock. Write me before you buy. It will pay you. Will ship pigs after May 1st.

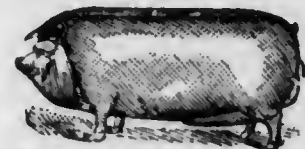
W. H. REED, Whitewater, Wis.

OAKDALE FARM

Property of H. A. DANIELS
Box 313, Ohio, Mich.

Exceptional advantages to introduce our LINCOLN SHEEP CHESTER WHITES } to readers of } this paper }
SCOTCH COLLIES }

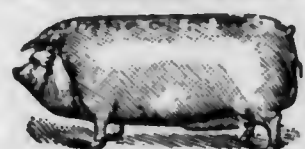
Write your wants immediately. Special offering Scotch Collies and Chester Whites now on hand.



Chester Whites

For years I have been selecting and breeding to build up a herd that would be uniform in shape, stamping other herds with the good qualities that I had succeeded in fixing in my herd. If in need of first-class Chester Whites come and see me or write your wants. Only the best sold for breeders.

T. A. STEVENSON, Shannon City, Ia.



ENON HERD CHESTER WHITES

Have some extra choice Fall pigs, both sexes. If you are looking for good ones write me. Barred Plymouth Rocks, best strains. Birds for sale. Eggs in season.

D. W. SHELLABARGER, ENON, OHIO

It is the Best Liniment.

Grassflat, Pa., Jan. 27, 1905.
The Lawrence-Williams Co., Cleveland, Ohio:

I used your Gombault's Caustic Balsam on a horse that had large side bones and entirely cured him. I keep it on hand at all times. It is the best liniment I can get.

GUY JOHNSON.

A SQUARE DEAL.

Kendalls, Wis., April 11: By special dispatch: The following telegram tells how three separator manufacturers met an earthquake that jarred the ground under their feet.

Kendalls, Wis., April 11th.
The Sharples Separator Co., Chicago: "In the presence of forty dairymen, Tubular won big contest here, yesterday, over three competitors. Sold committee six sixes."

Mr. Maire is the traveling representative of the Sharples Separator Co., of West Chester, Pa., Chicago, Ills., and Toronto, Canada, manufacturers of the famous Sharples Tubular Cream Separator. The Sharples Separator Co. certainly seems to have things their own way, easily winning all public contests in which they enter their machines. This contest certainly proved an earthquake to the three defeated competitors, as Mr. Maire's telegram says they were not only defeated but that six of the popular number six Tubular Cream Separators were sold on the spot as a result of this contest.



LAWN FENCE

Made of Steel. Lasts a life-time. We have no Agents. Sold to men at Wholesale Prices. 7 Cts. a foot up. Cheaper than wood. Catalogue Free. KITSLEAN BROTHERS, Box 387, Hance, Indiana.

LIVE STOCK IN ILLINOIS.

Secretary W. C. Garrard of the Illinois State Board of Agriculture has issued a statistical report on the live stock in Illinois for the year 1905, as follows:

According to the assessors' returns there were 2,515,894 hogs in the State May 1, 1905. At the equalized value of \$1.11 per head they were worth \$2,792,642.

The number marketed was 2,088,182, or about 83 per cent. of the entire number.

The average weight of those marketed was 217 pounds, giving a total gross weight of 452,635,320 pounds.

The average price of hogs was better than last year, those marketed averaging \$4.85 per cwt., their value at this rate being \$22,012,700.

The supply of hogs on hand December 1, 1905, was 93 per cent. and the average price per cwt. on that date \$4.40.

The number of cattle in the State May 1, 1905, according to the assessors' returns was 2,301,519.

At the equalized value of \$4.43 per head they were worth \$10,195,729.

About 23 per cent. of the whole, or 529,341, were marketed during the year. Their average weight was 1,070 pounds, making their total weight 566,182,735 pounds.

The average price of those sold prior to December 1 was \$4.15 per cwt., giving a total value of \$23,498,026.

The supply of beef cattle on hand December 1 was 92 per cent of the supply of one year ago and the average price per cwt. on that date was \$3.85.

There were 613,309 cows reported in Illinois in 1905. The average value per head was \$37, and the total value \$22,498,034.

Fewer sheep were reported by the assessors this year than ever before, only 425,824. Their equalized value is 73 cents, making their total equalized value \$310,851.

Of the number assessed 22 per cent or 93,629, were marketed, their average gross weight being 108 pounds, and the total gross weight of 10,125,227 pounds. The average price received for those marketed prior to December 1 was \$4.45 per cwt., making their total value \$451,746. The supply of sheep on hand December 1, 1905, as compared with the same date last year, was 88 per cent., and the average price per cwt. on that date \$4.45.

The wool clip of 1905 was unusually small, only 1,812,181 pounds being shorn. The average price obtained for it, 26 cents a pound, has not been equalled since 1883. The total value at this price amounted to \$476,931.

The total number of horses reported by the assessors this year is 1,095,907, and their equalized value is \$12.80 per head, making their total value \$14,027,610.

The number of colts foaled in 1904 was 76,976, being the largest number reported since 1894.

REGISTRATION OF GUERNSEYS AND JERSEYS.

At a recent farmers' institute in the State of New York, in answer to the question, "How does the foreign system of registration for Jerseys and Guernseys compare with the Ameri-

BLOODED STOCK

can system?" Mr. Valancey E. Fuller said:

"I presume the question refers to the system of registration in vogue in the Channel Isles, Jersey and Guernsey.

"In this country any animal can be recorded in the herd books of the respective breeds, if sire and dam are recorded, irrespective of individual excellence or performance.

"But in Jersey and Guernsey the practice differs; there, within 24 hours after the calf is dropped, it must be identified by a member of the Royal Agricultural Society, which publishes the herd book on each island. Within a month after birth a preliminary registration must be made, but a female cannot be finally recorded in the herd book until she is in milk and has been passed upon by an examining committee who score her, and she must possess such an individuality as will commend her as superior in their judgment.

"She is then 'qualified,' as it is called, or as we would say, registered by the designation H. C. (Highly Commended) or (Commended) or is rejected.

"If rejected, she can be brought up again for examination, but she is never finally recorded till approved by the examining committee. The practical application of this is that registration in Jersey and Guernsey guarantees not only purity of breed but individual superiority of all animals entered in the herd books. When the ancestors are all superior the males possess by inheritance, fixed characteristics which they can transmit.

"In this country, all that registration guarantees is purity of blood, for it matters not how inferior an animal or its ancestors may be, it can be registered. In consequence, we have on our herd books here many most undesirable animals, which should be sold to the butcher as they are really worthless as dairy animals or as breeders.

"It therefore behooves the farmer who buys a registered bull of any of the dairy breeds to know what inheritance he possesses.

"How can he obtain the knowledge? By finding out what the dam of the bull was as a producer, what his grand dam was, and also, if possible, what the great-grand-dam was. Such qualities as they possessed the bull can transmit, and he can transmit nothing else."—Hoard's Dairyman.

Oakview Poland Chinas

An extra lot of spring pigs that are large, growthy fellows, of the very best breeding. Our prices are right. For particulars address

W. H. CRESWELL
CEDARVILLE, O.

Wedo all kinds of Job Printing. Send us your work, it will be promptly done. Write us about it.

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent or exchange, poultry, poultry supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants, and vegetables. The cost of advertising is

Only Two Cents a Word.

all classified. Each initial or number counted as one word. No advertisement taken for less than 25 cents each issue. All replies must be sent direct to advertisers. Cash covering the exact number of words at 2 cents each must be sent with every order.

This Department for Live Stock Only.

CATTLE.

SUNNY SLOPE HERD of Red Polled Cattle—the beef and dairy breed. Choice young stock for sale. L. H. WALKER, Reed City, Michigan.

SHORT HORN CATTLE Either sex, fed-bred right herd of fifty. JNO. NORTHCUTT, Cynthiaia, Kentucky.

JERSEYS—Combination and Golden Lad. For sale—10 cows, 10 heifers and 20 bulls. S. E. NIVIN, Landenberg, Pa.

HOGS.

POLAND CHINA PIGS Both sexes that are beautiful and bred for quality from Early Sunshine, whose sire sold for \$5000. Also service boars. We guarantee satisfaction. Write us before you buy. G. F. McALLAN & SONS, Groveland, Illinois.

LARGE English Yorkshires, sired by "White Side Comet". CHAS. S. SNOOKS, Utica Mill Maryland.

MISCELLANEOUS

Money in Squabs. Our Free Book posts with little work you. Pleasure and profit with little work. **EASTERN SQUAB CO.**, 60 Hawley St. Boston, Mass.

FOR SALE—Shetland Ponies, Perrets, Poultry, Pigeons, Pheasants, Rabbits, Guinea Pigs, Goats, Cats, Dogs. 2-cent stamp for circulars. Col. Joseph Leffel, Springfield, Ohio.

CHESTER WHITE PIGS, \$1.00. Rose and Single Comb Buff Leghorn and Orpington eggs \$1.50. Short Horn Cattle. ORCHARD GROVE FARMS, Loganville, O.

POLAND-CHINAS, Choice spring pigs from registered stock. Price to sell. C. O. CARMAN, Trumansburg, N. Y.

POULTRY

POULTRY CATALOGUE FREE—Wyandottes, Reds, Barred Rocks, White Leghorns, Bronze Turkeys. Satisfaction guaranteed. Reasonable prices, FAIRVIEW FARM, Shrewsbury, Pa.

NELSON'S guarantee a fair hatch from their famous egg producing strains of Barred Rocks and Brown Leghorns. Write NELSON'S, Grove City, Pa. R.F.D. No. 12.

100 TURKEYS, Selected stock. Mammoth Bronze, White Holland, Buff and Narragansett. Eggs \$2 per 11. 15 varieties. Poultry eggs \$1.00 per 15. S. DURIGG & SON, Armstrongs Mills, Ohio.

WHITE PLYMOUTH ROCK EGGS, at \$1.00 per setting. First class stock. H. L. NEAR, Jamestown, N. Y.

FANCY POULTRY Eight colored page price list free. Address, G. G. Shoemaker, Box 88, York, Pa.

WHITE and BARRED Plymouth Rock fowls and Mammoth Bronze Turkeys. R. H. McFADIEEN, Oxford, Pa.

EGGS for Hatching—Rose Comb Rhode Island Reds. Price \$1.25 per 15. D. C. HUTCHISON, Oxford, Pa.

BARRED P. ROCK Cockerels. First-class birds. Write me. GEORGE C. FOWLEY, Oxford, Pa.

WHITE PLYMOUTH ROCKS Eggs for sale from high scoring birds and farm raised stock. Eggs \$1.00 per setting of 15. W. T. BERRY, Virginia, Ill.

Horse Owners! Use GOMBAULT'S Caustic Balsam

A Safe, Speedy, and Positive Cure
The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
THE LAWRENCE-WILLIAMS CO., Cleveland, O.

Brood Sow Ration

Brood sows, before farrowing, need a nutritive ration of 1 to 6.56, according to the standard. In practical feeding it should be anywhere between 6 and 7. Wheat bran has a nutritive ratio of 1 to 4, and wheat middlings 1 to 4.8—both too narrow. Skim milk has a ratio of 1 to 1.9—a very narrow ratio; only a few feeds have a narrower ratio. To balance it, some food must be used that has a wider ratio than 1 to 6.56. You should have used corn meal, ratio 1 to 11.7, or ground oats and corn, 1 to 10, etc. The following mixtures will balance.

(1)—Corn and oats equal parts, ground, 1 pound; skim milk 2.6 lbs.
(2)—Corn meal, 1 pound; skim milk, 2.12 pounds.

Skim milk weighs slightly over 2 pounds per quart, so that 1 pound of either corn and oats or corn meal will balance about a quart of skim milk. A sow weighing 200 pounds should have about 4 quarts of the mixture per day, more or less, according to her capacity or appetite. Where skim milk is scarce, middlings or bran, or both, may be used. The following mixtures balance:

(3)—1 pound corn meal; 1 pound bran.

(4)—1 pound corn meal; 1.4 pound middlings.

(5)—1 pound corn and oats equal parts; 1.3 pounds bran.

(6)—1 pound corn and oats; 1 pound middlings.

You can mix either of these mixtures with the skim milk mixtures (1) and (2) and thus lessen the quantity of skim milk, proportionately. Corn meal, or corn and oats, ground, equal parts, are the best mixtures with skim milk for swine of all ages.—Swine Breeders' Journal.

White's Class Annual Round-Up.

The annual round-up of White's Class Advertising Co., Chicago, at the Auditorium Hotel, Tuesday, the 22nd, was a most enjoyable occasion; a pleasant meeting of advertisers and publisher from twenty States, showing the growth and development of their agricultural advertising. There were 600 seated at the banquet, a feast of good eating, good cheer and good toasts of advertising interests, benefits, and progress by men who have achieved success by judicious advertising. There was in all a tone of praise and loyalty to the Frank White Advertising Co.

BLOODED STOCK Raising Dairy Heifers for the Cow Market

Every now and then one comes up against a "new" proposition that in its nature might have two entirely opposite answers, like this, for instance: "What would be the outcome of raising a bunch of fine heifers for the trade, where one has plenty of skim milk and feeds it to heifers instead of hogs, and breeds them to come in at about twenty-eight months old?" By the way that anything in the shape of a cow sold here, readily, at from \$37 to \$60 a head this spring—and the better the cow the better the price—there would seem to be money in it.

Fine, grade two-year-old Holstein heifers went fast at \$40 a head, and some others at far better prices. The proposition is like this: "Calico heifers" do not sell as do good grades of some of the best breeds, and to go into this business one wants uniform lots, and of the same kind, not a mixed hotch-potch of an exhibit. One will have to fix for this business. He must have clean and dry stables, a well shaded and well sodded pasture and plenty of fresh water. If this skim milk is fed, feed it sweet, not sour or even changed in texture. It will cost something, but add some oatmeal and a "pinch" of gluten to this milk, and in the winter keep these calves growing; and be sure that they get good silage for the best part of their roughage.

I have not seen it asserted that a little extra flesh, if made on a protein basis, is any detriment to a growing heifer. Don't starve or pinch them in flesh to become poor. Have a good, warm stable, keep them clean and see that they grow some every day. Breed them at about seventeen months old. It may cost a little more, but it will pay you if you can say they are bred to such a family, of known dairy quality, and the calf will be a good rebate to the buyer in the price.

You must determine about the season that they should freshen. In some localities spring and in other places fall cows are wanted most. A little oil meal will be a good thing to add to the grain ration in the second period of grain feeding. Tie and handle those soon to be cows as if they were old timers—all but milking them. Try to make them think they are cows. Let people know what you are doing, and have a price ready to sell, and do not haggle.

A steer that sells at two years at \$50 is a dandy, and must have had a lot of food to sell at—more than the heifer; and why she should not bring \$45 at least is for the grower to say. In the dairy districts, selling three-day-old calves—all of them—and then buying cows to keep up the dairy is the universal rule, hence the scarcity of cows and the buying of anything called a cow to fill the want. If a man would raise cows that promise market merit, there is no reason why he would not succeed, but raising a lot of stunted scrubs will result in failure without a doubt.—John Gould in Tribune Farmer.

**A Humane Society
in a
Bottle.** **KENDALL'S SPAVIN CURE.**
Nothing affords such relief for Curbs, Splints, Ringbones, Spavins and Lameness as
Kendall's Spavin Cure.
Whitford, N. C., June 28, 1906.
Dr. B. J. Kendall Co., Enosburg Falls, Vt.
Gentlemen—I have used Kendall's Spavin Cure on Spavins, Ringbones, Splints, Galls and Sores, and it has cured them all.
Very truly yours, B. M. Clark.
Price \$1.50 for 25¢. Greatest known liniment for family use. All druggists. Accept no substitute. The great book, "Treatise on the Horse" free from druggists or
Dr. B. J. Kendall Co., Enosburg Falls, Vt.

CAR-SUL
The
Disinfectant Dip
That is Guaranteed.
Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.
Send For Free Book
on care of hogs and other livestock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.
Trial gallon \$1.50, express paid; 5 gallon can \$4.00, freight paid.
Moore Chemical & Mfg. Co.
Department of Hygiene, 1501 Commerce St., Kansas City, Mo.

A MARK HERE means that this paper is sent to you as a sample copy. We wish you to look it over and we feel that you will find it one of the best live stock papers you ever read. Below you will find our subscription offers and trust to be favored with your order.

SUBSCRIPTION BARGAINS

- No. 1. Single subscription, 25c a year.
- No. 2. Send four new subscriptions at 25c each for one year and get your own subscription advanced one year, free.
- No. 3. Send us \$1 and have your subscription advanced 5 years.
- No. 4. Send us \$1 and have your subscription advanced four years and get your choice of recipes for Scours and Thumps or Plans for building a Hog House.

CLUBBING BARGAINS

Successful Farming, Des Moines, Ia. This great agricultural paper has won a name in the corn development now going on in the West. How to select seed, how to plant, how to cultivate so as to increase the bushels per acre is important to every farmer. This paper and **Blooded Stock** both one year for 40c.
Agricultural Epitome, Spencer, Ind. is a great monthly farm paper printed out on a big 320-acre farm, where experiments are conducted by experts and the results published in the paper. This makes it a paper of great value to the business farmers who want to keep posted on the best and latest methods. This paper and **Blooded Stock** both one year for 40c.
Farmers' Voice, Chicago, Ill. is one of the finest illustrated farm monthlies published. It is a regular family paper, concerning not only the farm topics but also the household, making it one of the most valuable papers printed. Every issue is worth the subscription price. This paper one year, along with **Blooded Stock**, for 65c.

All three papers, along with **Blooded Stock**, one year, for \$1.00.
You cannot get a better combination of valuable information than this offer, for the money, anywhere. Send your order at once to

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VOL. XII.

OXFORD, PA., JULY 1906.

No. 5

A New Idea in Storing Milk and Butter.

A recent invention, called a cooking chest, seems to offer a suggestion that may be of value on the farm. In a cooking chest the idea is to economize heat by preventing its escape. A kettle of meat or vegetables is taken, while boiling hot, from the fire and packed in the chest. As the heat cannot escape, the cooking goes on for hours in the chest without any fire.

The Farm and Fireside, thinking that this invention might be used in cooling milk and preserving butter, asked the writer to make some experiments with one of these cooking chests. The chest consisted of a common wooden packing box, measuring on the inside twenty inches long, by twelve and one-half inches wide and fourteen inches deep. This box was lined on the inside with heavy corrugated paper and filled two inches deep with sawdust, and covered with heavy wrapping paper. The sides were then lined, three inches thick, with excelsior, and wadded with woolen blanketing, securely tacked on. Inside the box was then placed a tin bread box (costing twenty cents), and for the whole chest a loose wooden cover was made.

The first experiments were made to find out how long cold water can be kept cold in such a storage chest. The water used was from a very cold well and was carefully tested before and after each experiment with a Fahrenheit thermometer. In the first experiment an enameled-ware pail, holding four quarts, and having a tight cover, was filled with well water at 40 degrees F. The pail was placed in the tin box and wrapped in heavy burlap, and the box closed and completely covered with a heavy blanket. Over the blanket was laid several newspapers, and on these was laid the wooden cover, with a weight on top to keep it pressed down, air-tight. The chest was closed exactly at twelve, noon. Seven and a half hours later the chest was opened and the water found to be 54 degrees. In the next experiment the pail, filled with water at 47 degrees, was packed in the chest at half-past seven p. m. At eight the next morning the water was 54 degrees. In the third experiment the water, at 45 degrees, was placed in the chest at eight in the morning, and

grees. These experiments show that, by the aid of such a chest, water can be kept cool twelve hours or more.

In the fourth experiment, a quart can of milk was placed in the pail, the water being 44 degrees. The milk-can, before being placed in the pail, was chilled by letting it stand in another pail of water fresh from the well, in order to prevent the can from raising the temperature of the water. The pail and milk-can were placed in the chest and remained there for five hours, when the milk was found to be 52 degrees, and a glass of the milk was tested by several persons and pronounced cold and refreshing.

Two experiments were made with well water in keeping butter. The pail was filled half full of water at 50 degrees and a tumbler inverted in it. On top of the tumbler was placed a dish of butter and the chest closed at nine a. m. It was opened six and a half hours later and the butter was firm and hard. In the second experiment the pail, full of water at 48 degrees, was put in the chest without the cover and a dinner plate laid over it and on the plate was placed some print butter and cream cheese. The chest was closed at half past two p. m., and on opening the chest at half past six the thermometer resting on the butter showed it to be 54 degrees. The chest was closed again and reopened at half past six the next morning, when the temperature was found to be 56 degrees, and the butter and cream cheese were firm and hard, and were served on the breakfast table. In this experiment the water kept the butter hard for sixteen hours, and, had the milk been placed in the chest with the butter, it would have been cold and just at the right temperature to serve on the table. In another experiment a small quantity of ice was added to the pail of well water. This reduced the temperature to 42 degrees. The chest was closed and not opened for twelve hours, when the water was found to be 52 degrees, showing a very great economy of cold.

The experiment shows that it is possible to keep milk and butter cold in such a storage box. Such a box would hold an ordinary wooden pail in which could be placed four milk bottles resting in the water up to

the tops. All that is necessary is that the box must be well wadded with excelsior, straw, or sawdust, kept in place with woolen or burlap, and that the pail of water be placed in a tin box that can be taken out and washed, if any water or milk be spilled while packing the box. The well water used in the experiment was unusually cold, but any water can be chilled to 40 or 45 degrees F. with a small piece of ice and then kept cold for many hours. The box might also be made larger. Several boxes could be used when a large quantity of milk or butter is to be stored.—Charles Barnard, in Farm and Fireside.

\$1075 FOR JERSEY BULL CALF.

Successful Sale at Hood Farm, Lowell, Mass.

An auction sale of Jerseys and Berkshires at Hood Farm, Lowell, Mass., on Wednesday, June 13, was attended by representative breeders from all parts of the country, including Oregon, Missouri, Ohio, Virginia, New Jersey, New York and New England. The sale was under the management of L. F. Herrick of Worcester, Mass., and the auctioneers were Col. R. R. Baily of Gibson City, Illinois, and O. A. Kelley of Worcester.

The weather was delightful and the stock was in fine condition, and brought good prices. The highest price paid for a bull was \$1075 for a bull calf, the son of Hood Farm Pog-is 9th and Tonona 9th of Hood Farm. The sire of the calf is a son of Figgis, champion and grand champion cow at the World's Fair, St. Louis, 1904, and the dam is the champion yearly authenticated test heifer of the breed, bred, owned and tested by Hood Farm. This bull calf was bought by Hartman Stock Farm, Columbus, Ohio, and the buyer refused \$1500 for the calf after the sale. The price for cows was also topped by the Hartman Farm on Hood Farm Golden Beauty, at \$525, and the cow is a beauty too.

The Berkshires brought good prices for an eastern sale. Several daughters of the phenomenal show boar at the Western fairs of 1905, (Continued on page 8.)

BLOODED STOCK

BLOODED STOCK

FOR PRACTICAL STOCK BREEDERS AND FEEDERS

PUBLISHED MONTHLY AT OXFORD, PENNA.

UNDER EDITORIAL MANAGEMENT OF C. E. MORRISON.

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TUBERCULOSIS IN SWINE.

In an address on the above subject before the Iowa Swine Breeders' Association, Dr. J. A. McNeil said:..... "The subject of tuberculosis is one of world-wide importance. It is one that we are all interested in. We are interested in the subject from the standpoint of human tuberculosis and probably from that cause we take a deeper interest. Tuberculosis in man, tuberculosis in animals, no matter whether swine, cattle or fish or birds, is practically the same. It is simply a modification of the tubercular germ or adapting itself to a different animal or individual just like the seeds that you take from one section of Iowa to another. They get acclimated, grow and develop and get so they will grow in any part of the State; and so it is with the tubercular germ. The different classes of tubercular germs simply depend for their existence and change in shape upon the environment in which they grow. Whether they are more deadly or less deadly depends upon the tissue in which they grow. The different germs as they grow and develop affect animal tissue. In taking up the subject of tuberculosis in swine it will be necessary to consider tuberculosis in general as it concerns cattle. Tuberculosis by the ingestion of food, sputum, excreta—the common cause of tuberculosis in swine—the different conditions or situations or general influences all have to do with the production of tuberculosis no matter whether in the human family or in the lower kingdom and in order to keep it up and discuss it I simply follow notes that I have made.

Now as to tuberculosis in cattle. We know that we have a great deal of tuberculosis in cattle in Iowa because we have a lot of cattle and we have a lot of well bred cattle and cattle that are well bred are usually well cared for. They are kept inside, kept tied up possibly a good part of the time, and animals that are kept under these influences develop tuberculosis to a greater extent than a herd of animals turned out in pasture or in open lots. There are many reasons why animals kept together will be come infected or where one animal kept in a stall will infect animals around. One reason is that where we have tuberculosis of the glands of the throat the cattle cough, the matter drops in the feeding box, then it is pushed along the trough and the different cattle along the trough become infected as a result. Animals kept in the single stalls with high partitions will affect animals on either side, but not those kept in stanchions kept away. There is a difference in susceptibility. Some individuals will contract tuberculosis while others of the same family under the same conditions will not. It is heredity. Recent experiments extending back ten years have demonstrated this. We sometimes find tuberculosis in the offspring where we did not find it in the parent. The inherited tendency to become affected is the reason why one herd of cattle will get it or one strain of cattle and transmit the same tendency. The same quality that existed in the tissue affect the general conformation of an individual as the polled condition in the Angus or in the Galloway. There is a certain property that the tissue of the body has of taking up germ life and giving it life and existence. You will find the tendency in certain individuals of a family. That individual probably is more susceptible to scarlet fever or some other disease. That is simply the tendency that exists on the part of the animal body to take on these germs and become infected. There is a large percentage of human existence that become infected with tubercular germs. It has been esti-

mated that probably 50 per cent of the individuals that reach manhood or womanhood that die from other causes have at some time been infected with tubercular germs. It is the same in cattle and we have it so in all the warm blooded animals.

In passing on from this introduction into what we are to discuss, we find that the conditions or environment surroundings swine disease are a little different from those of cattle. The swine are shipped to market within a year, usually. The disease develops with rapidity in swine. If they do not have the influences surrounding them for infection, they go to the market without tuberculosis. This is proven from statistics from Iowa and Wisconsin of tuberculosis in swine from dairy districts. About a year ago I was at an abattoir and for seven days killing we had from 230.95 condemned in one day, and from an aggregate of 4,777 animals 101 condemned which makes 2 1/2 per cent. One day from 528 killed there were 19 condemned, from 617 killed 25 condemned. I talked with the inspector and he said for that time of year that would be a good fair average. The infection was brought about by the use of separator milk from creameries or separator milk from the man's own farm. It seems like an easy matter to get at, in order to stop the infection or what will be a loss to the farmer. In regard to tuberculosis in Iowa I have talked with commission men in Chicago and they tell me that there are certain dairy districts in the state of Iowa that they would not buy hogs from; that if they did they would buy them at a reduced price. They come around to you after they have bought what they want and they will pay you at a low enough price that they will have assurance that they will get their money back or enough out of it to pay for loss of animals condemned. It will react in the end. It has reacted in Iowa I know of these districts. I have talked with inspectors and with firms that say that they will not accept hogs from certain buyers because they have lots of tuberculosis in that district and they will not run the risk of losing hogs from inspection. The packing house people in Iowa are not going to deal in hogs that are tubercular. For instance, we have an infected district here in Des Moines. You telegraph for markets to Marshallton and they will telegraph back they don't want your hogs. You ship them to Chicago. If they do not know about the tuberculosis they will accept them, and, of course, you are paid accordingly. It can not be detected before they are killed. They may be and probably are just as fat as the other hogs. If they are not tagged before they go to the abattoir, the packer will lose. If 2 1/2 per cent of the animals shipped in there are tubercular it means a loss to somebody. What will the packer do if it keeps up? They will do what is best for themselves, and that is; instead of making the price lower and taking it from you, they will go back and say, "I will buy your pigs and if they pass inspection I will pay you." If you send hogs and they pass inspection you will get your money. If another man sends hogs fed on creamery milk they will take the hogs. If he sends sixty or seventy head and twenty are condemned, they will figure it on the bill the same as feed and yard and everything else. There is some conjecture today as to the way in which the packers will get around tuberculosis.

Infection comes from the creamery. You get it in butter, in cream, in cheese. It comes from the cow and from the udder of the cow. If you have tuberculosis in your cattle you will have it in your hogs. You can test it by tuberculin test. There is a chance for a mistake but the percentage of mistakes is very rare so that for all practical purposes it is the best one we have. It is not infallible, but it is a good test. In this infection of tuberculosis we find that there are practically three kinds, pulmonary, intestinal, and mammary; pulmonary, of the lungs; intestinal, of the intestines; and mammary of the mammary glands. We know that in cattle the infection is brought by the air or the food. It can be carried, and we know that infection is by the animal having tuberculosis of the lungs and expectorating this matter they swallow it and it passes through the digestive tract and by this method you get an intestinal infection. You might have the lung infection, second, the abdominal or intestinal infection and lastly the mammary infection. You do not have tuberculosis of the mammary glands in order to get tubercular germs in the milk. This is one of the most prolific sources of its being transmitted to calves and pigs. You can have what we call generalized tuberculosis or local tuberculosis.

* * * *

A few words about hog cholera and swine plague. There are fifty million dollars worth of swine in Iowa, one-eighth of the total value of live stock in the United

BLOODED STOCK

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States within the state of Iowa. I have the information from the live stock journals. Fifty million dollars is the valuation of hogs. Now, if you figure the loss of 6 per cent that means three million dollars loss to the hog raisers in the state of Iowa every year. That is due practically to wine plague or hog cholera. There is not much difference between the two diseases. The swine plague in England is hog cholera in this country. If it is in the intestine we call it cholera. They are nearly always a mixed infection. We thought we had at one time discovered what caused hog cholera. In the last two years it has been found that it is an invisible germ. We have to deal with it from a radical standpoint. Suppose we have a loss of three million dollars from the hog raisers of Iowa. The loss from tuberculosis is not a direct loss as far as the loss of life of the animal but it is a loss inasmuch as an animal with tuberculosis will consume more corn than a healthy animal in a healthy condition. There are certain factors that will tend to produce hog cholera. It has been argued that corn will do it. Corn will not produce tuberculosis. It will produce a condition of the digestive tract by which the germ will not be destroyed because of a lack of acidity in the stomach. The germ slips by and passes into the intestines and causes what we know as hog cholera. The toxine generated by the germ floats in the system and affects the animal. How is it to be dealt with? In Canada they have a plan of quarantining and slaughtering every herd in which there is swine plague or hog cholera. They have that way of dealing with it in order to suppress it and that is the only way that they will ever be able to extinguish swine plague and hog cholera. It is the only preventive. Just like the foot and mouth disease that they had to stamp out by buying up and slaughtering everything that was affected. If it breaks out again that is the only way of getting rid of it. The loss of a few individuals does not mean much. It is the loss of the individuals that they would gain in the time that they are affected. In order to suppress the disease you must destroy it.

THE FUTURE HOG OUTLOOK.

C. M. Miller in the Western Swine Breeder says on the above subject:

"If a man had attempted to tell the people ten years ago about the developments in hog raising that have taken place since then, he would have been classed as a fit subject for the lunatic asylum."

Would you believe it if the writer would make the statement that the hog business is only in its infancy? No doubt that many who read this will say he is only trying to humbug the people and work them for more advertising, or he is trying to boom the hog business. Others no doubt will agree with the writer. Whether you agree with me or not, it makes no difference. I would ask just one thing and that is this—please bear in mind this question for the next ten years and see if I am not right.

Did you ever stop to think of the rapid rate at which our population is increasing? Did you ever stop to think how rapidly the mouths are increasing which eat pork? Some one has got to produce the necessary article to satisfy hunger. Will they produce it from hogs that necessitate one year's feeding to produce 200 pounds of eatable meat or will they produce it from hogs that will make 200 pounds of eatable meat at eight to ten months of age? This is what the fine hog breeder is doing. Ten years ago, when the best sales that were made only averaged from \$40 to \$50, you could hear men say that it will not last long; but today our prominent breeders are making averages three and four times that high and you can still hear the same remark. Have I not a sound foundation to repeat myself again and say the hog business is only in its infancy?

Never before has the future of the hog business looked half as bright as it does at the present time. Certainly it will have its ups and downs, but when it drops a little it will only be to rebound and soar the higher. Show me any business that has not had reactions and I will show you a business that every one would like to be interested in. They are not to be found.

Not many years ago the East was the centre of the hog business. Today Illinois and Iowa are the centre. Breeders, you better look out, for the South and West have bought more good stuff this year than was ever known in the history of the hog business. This business is reaching out, it is becoming a national affair, it has

reached beyond the boundary of one or two states and nearly every state in the Union now looks up to the hog.

The hog business is becoming one of the greatest industries in the United States. It is a business that the most apt cannot learn in a day, a year or a lifetime, for there is always something new that the progressive swine breeder can learn."

SOME DUTIES OF A SWINE BREEDER.

The first duty of a breeder, in order to have a hog to sell that will please the buyer, is to raise the kind of hogs that the trade demands. They should be strictly up-to-date in breeding, then feed on food that produces plenty of bone and muscle, giving plenty of exercise, etc., in fact treated very much as if he intended to keep them for use in his own herd. After a hog leaves the breeder's care, his condition will very likely change; perhaps he will be turned out with twenty or thirty sows, perhaps shut in a small dark pen and fed corn and water, or perhaps given the best of care according to the buyer's judgment and made so fat and helpless that his future usefulness is ruined, so that in order for a large per cent of the boar pigs that a breeder sells to prove sure breeders under the varying conditions which I have mentioned, they must have a constitution and vigor that is hard to overcome. I think it is a god plan for the breeder to tell the buyer just how his hogs have been fed and handled, then if he is so inclined he can give his pig very much the same care that it has been accustomed to have, or at least make the change gradually. When a breeder receives inquiries by mail he should describe his hogs as accurately as possible and guarantee them as represented; if not as represented to be returned at the seller's expense and the purchase price to be refunded.

All boars should be guaranteed to be reasonably sure breeders. Failing in this, the breeder should be notified as soon as the fact becomes known to the buyer. Right here is where the trouble begins. You may sell a pig to a farmer, who perhaps takes him home and turns him out with a lot of sows, some of which will fight him while he is strange to them and his surroundings, and he will become shy and afraid of the sows, and the owner takes it for granted that the pig has no ambition and is no good, and he has a complaint to make right away, says, "he won't look at a sow," etc. Well, what are you going to do about it? Take him back of course, and send him another pig or refund his money.—Swine Breeders' Journal.

MEETING OF EXECUTIVE COMMITTEE.

At a meeting of the Board of Directors of the National Duroc-Jersey Association, called to meet in Peoria on June 7, 1906, the resignation of Robert J. Evans as Secretary and H. C. Shelton as President was accepted. E. Z. Russell, of Blair, Neb., was appointed as President, and H. C. Sheldon as Secretary.

H. E. Browning, of Illinois, was appointed as a member of the Board.

The bond of Secretary Sheldon was fixed at \$3000, an increase of \$1000 over the former Secretary's bond, also the bond of the Treasurer was ordered increased from \$3000 to \$10,000. It was ordered that in the future, commencing with Volume 18, that the volumes be mailed out prepaid to all members that had paid postage or do hereafter pay postage on Volume 17, also to all members purchasing stock since Volume 17 was issued.

It was ordered that the Secretary in his monthly reports must give the pedigree number at the commencement and end of each month's report and that he must make settlement with the Executive Board for all pedigrees recorded by him. It was also ordered that the Secretary receive no personal checks. All remittances must be made by Draft, P. O. Money Order, Express order or Register letter.

Executive Board—Smith Brown, C. E. Pratt, A. F. Hoffman. H. C. Sheldon, Secretary.

Care in Selling.

To the young breeder the temptation is great to register every pig eligible, then to sell him for a breeder later. Right here is one of the reasons why many cannot succeed with pure-bred stock. A satisfied customer is a good advertisement, but his effectiveness is as nothing to that of one who feels that he has been imposed upon, because such a one loses no opportunity to vent his dissatisfaction, and the reputation of the careless breeder is done for in that community.

An old established breeder can often sell an ordinary pig to a customer for at least a fair price and have the buyer satisfied when a beginner could not satisfy him at all. One of the reasons for this is that the experienced breeder knows how to describe his stock so as not to unduly raise the expectations of the buyer, and also in knowing what the hog is reasonably worth. The younger breeder, though equally honest, with the enthusiasm born of recent conversion, is more likely to overdo the descriptive part of the transaction, and to set too high a price on what he has to sell and thus disappoint his customer instead of surprising him. The young breeder does not understand why he should not get as much for a given quality as should the man who has spent years and perhaps a lifetime, in the breeding business, but he cannot reasonably

expect to. He fails to realize that it is an economic principle that investment is something to be realized on, and that years of hard work and study, of advertising and money spent in showing, is a part of the working capital of a breeder, and that interest on this investment is figured into the price of every hog sold. But the world accepts this law, and so do buyers, though they may never have stopped to reason it out.

And it is a fact that breeding stock is worth more from a herd with reputation than from an unknown. When an animal leaves a known herd it carries with it a part of the reputation of its breeder, and the buyer will realize on this, and when he comes to sell, he in turn will realize on his investment. And then again, in buying from a herd with a reputation the blood lines are usually better established than would be the case with the beginner. It may not have been any better blood to start with, but if the man who handled and mixed it for a number of generations was instinctively a breeder he would have learned how to mix it for better results. He would know what to avoid as well as what to mate for, and the chances are in favor of prepotency. The beginner may be a good judge of individuals and of pedigree as well, may have bought wisely, but he will naturally be at a disadvantage in mating as he is in handling and mix-

ing unknown quantities, and naturally cannot foretell results till he has experimented for a few generations. Especially is this the case when he has browsed around among different herds, picking up something here and there, for through some of his purchases he is bound to get hold of some antagonistic principle, and till this is fully subdued it is likely to break out at any time. The buyer understands this and makes allowance when he buys. The beginner may feel that it is unjust thus to be punished for being young in the business, but really it is not, as he ought to be willing to divide chances with the buyer. The latter has to take his, says the Dakota Farmer.

Then again, it is fair to presume that if a breeder has a reputation he must have earned it, and that there is quality in his stock or he would not have gained standing, while the beginner has his to demonstrate.

Many an old breeder does not cull close enough for his own good, never having learned the value of it. To the young breeder having ambition—and all beginners should have—this lesson is vital, and the time to learn it is early, and the better it is learned the faster the progress. In hogs, especially, when increase is rapid, there is less excuse for carelessness than for instance with cattle or horses where progress is much slower.

PUBLIC SALE REPORT LINC LUKENS, POLAND CHINA SALE

The summer public sale of Poland-Chinas held by Linc Lukens, of Diso, Ind., June 30, 1906, was a success in every respect. His new sale pavilion is roomy, light and comfortable. The attendance was large for the time of the year, and consisted mostly of breeders, as you will see by the list that all went to breeders in six states. As to the offering, Mr. Lukens in starting off his new sale pavilion, placed before the breeders the best lot he ever sold at public sale, and some of the best male individuals ever sold at public auction. The breeders of the black hog at the sale were pleased with the offering and of the good appearance the old stand-by breed made. Many compliments were passed on Mr. Lukens, not only for his enterprise but for the fine offering he had and his great effort in keeping the black hog to the front. The offering had great quality and finish, with plenty of growth, and all the best blood of the breed. The old boar Chief Perfection 2d was a strong factor in the sale, there being four head of September pigs, (Nos 1 to 4), sold at an average of \$158.15. The boar No. 2 sold for \$275, and was the best boar sired by the old hog we ever saw, and the best boar Mr. Lukens ever raised. He promised to be one of the greatest boars of the breed, but Mr. Lukens had the misfortune to lose him. After being crated and at the depot he made such strong effort to get out of the crate that he died. This litter was all good. The high price of the

sale was for the half interest in the boar Go On by Keep On. The interest brought \$1,000, going to Wm. R. Loush, Gardner, Ill. It came near going to Henry county, Ind., for the \$995 bid was made by A. R. Thompson, of Blountsville. The fifty-one head sold for \$5,158.50, making an average of \$101.14. Forty-one were sows, selling at an average of \$72.20, and ten boars at an average of \$207.50. Ten sows sold for \$100 and over, making an average of \$145.50. Five boars sold for \$100 and over, or at an average of \$353.40. The auctioneers were Powell, Correll, McCracken and Travis. They did good work. The sale was a long one, the last hog being sold at 6.30 P. M. The following are the prices paid:

BOARS.

Go On by Keep On, half interest, W. R. Loush, Ills. \$1000 00
No. 1, Magic, by Chief Perfection 2d, Frank Nelson, Bainbridge, Ind. 80 00
No. 2, Magician, by Chief Perfection 2d, Thos. Hudgin, Renville, Minn. 275 00
No. 3, Conjurer, by Chief Perfection 2d, J. W. Williams & Son, Briant, Ind. 80 00
No. 18, Crown Perfection, by Chief Perfection 2d, W. Phil Banks, Warsaw, Ind. 60 00
No. 19, Jewel Perfection, by Chief Perfection 2d, Frank Fites, Denver, Ind. 60 00
No. 20, Keep Step, by Keep On, A. R. Thompson, Bountsville, Ind. 225 00

No. 21, Keep Alert, by Keep On, Leach & Colvin, Anderson, Ind. 150 00
No. 22, Crown Prince, by Meddler, W. D. Collard, DeGraff, Ohio. 162 50

SOWS.

No. 4, Mystic, by Chief Perfection 2d, F. L. Himmeyer, Letamora, Ind. 197 50
No. 5, Day Dawn, by Big Chief Tecumseh 2d, W. R. Loush 91 00
No. 6, Leona, by Chief Sunshine 2d, C. E. Polk, Findley, Ill. 300 00
No. 7, Silky, by Top Chief, W. R. Loush. 72 50
No. 8, Bessie Keep On, by Keep On, R. E. Moffett, Plattsburg, Mo. 115 00
No. 9, Lady Top, by Top Chief, Thos. Hudgin. 40 00
No. 10, Mary E. L., by Perfection E. L., A. R. Thompson 60 00
No. 11, Ellen E. L., by Perfection E. L., Beeson & Son, Etna Green, Ind. 77 50
No. 12, Topsy E. L., by Perfection E. L., L. Gilleron, Graybill, Ind. 61 00
No. 13, Maud Keep On, by Keep On, H. Spaulding, Covington, Ind. 75 00
No. 14, May Keep On, by Keep On, Frank Fites. 80 00
No. 15, Fancy On, by On and On, J. R. Young, Richards, Mo. 125 00
No. 23, Bessie Top, by Top

Chief, C. M. Teegarden, Warsaw, Ind. 67 50
No. 24, She's a Gem, by Top Chief, Milshaw Bros., Colchester, Ia. 65 00
No. 26, Princess Top, by Top Chief, J. V. Blackley, Valparaiso, Ind. 60 00
No. 27, Wild Deer, by Sunrise, Wm. Osborne, Wana-tah, Ind. 52 50
No. 28, Fancy Prize, by Chief Perfection 2, Frank Nelson
No. 29, Fancy Perfection, by Chief Perfection 2d, Melshaw Bros. 72 50
No. 31, Royal Maid, by Chief Perfection 2d, F. Walmuth, Elgin, Ill. 87 50
No. 32, Lady Hatfield, by Miami Chief, W. H. Baker, Osborne, Ill. 75 00
No. 35, Black Silk, by Chief Perfection 2d, Beeson & Son 27 00
No. 37, Lady Modjeska, by Chief Perfection 2d, Frank Fites 100 00
No. 40, Violet, by Chief Perfection 2d, W. R. Loush. 100 00
No. 41, Glittering Gold, by Chief Perfection 2d, Frank Nelson 170 00
No. 42, Double Perfection, by Chief Perfection 2d, Lehman Bros. 85 00
No. 43, May Apple, by Chief Perfection 2d, H. L. Vandermarck 70 00
No. 45, She's a Daisy, by Top Chief, W. R. Loush. 102 50
No. 47, Keep a Daisy, by Keep On, Lehman Bros. 140 00
No. 48, Mocking Bird, by Sunrise, W. R. Loush. 100 00
No. 50, Princess Maud, by Prince McKinley, W. R. Loush 42 50
No. 52, Apple Blossom, by Majestic Perfection, J. S. Pool, Piper City, Ill. 39 00
No. 54, Pearl Top, by Top Chief, Beeson & Son. 37 50
No. 59, Watercress, by Mighty Perfection, Melshaw Bros. 37 00
No. 60, Top Ice, by Top Chief, Thos. Hudgin. 31 00
No. 61, Keep Prince, by Keep On, Thos. Hudgin. 25 00
No. 80, Silkey Keep On, by Silkey Perfection, Lehman Bros. 27 50
79 00

The Wool Growers' Association of Southern Idaho has determined upon a plan for certain sale days on which wool at different points will be offered to the buyers. Furthermore, if the owners do not wish to accept the price offered, they will consign their clip to President F. W. Gooding in Boise, who goes at once to that place to make the necessary arrangements for the sale of this western wool.

Wool growers of the country near Lewiston, Idaho, have 500,000 pounds of wool on hand and are holding it for better prices. At a recent meeting only two bidders appeared, and their bidding ranged from 14 to 20 cents a pound, which the growers claim is entirely too low.

Sheep by the thousands have been driven in the last few weeks from central Washington into the mountain ranges of Chelan and Okanogan counties. Because more of the Washington forest reserve has been thrown

open for grazing purposes than ever before, a greater number of sheep will be pastured this summer on the eastern slope of the Cascade mountains than ever before.

Does Its Work on all Kinds of Bad Legs.

Ascot Park, Los Angeles, Cal., Dr. J. B. Kendall Co., Feb. 4, 1906. Enosburg Falls, Vt.

Dear Sirs—I have been using your Spavin Cure all Winter, and find it is the best liniment I have ever used. I use it on all kind of bad legs and find it does the work, and I would like you to send me a book to direct me how to use the Spavin Cure. Yours very truly, J. H. Buscher.

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48 pages of well-printed, easy reading, finely illustrated facts for the farmer who wants to make his cows pay the biggest profit. One cent brings you new Catalogue No. 199. Write the postal today.

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Eighteen centrally located distributing warehouses throughout the U. S. and Canada. Prompt delivery.

A Big Difference

One Minute's Washing as compared to at least fifteen. Wouldn't you like to save at least fourteen minutes twice a day? One minute with a cloth and brush cleans the absolutely simple Sharples Dairy Tubular Cream Separator bowl shown in the upper picture. It takes fifteen minutes to half an hour with a cloth and something to dig out dents, grooves, corners and holes to clean other bowls—one of which is shown in lower picture.

Washed in 1 minute

Count the pieces—notice the difference—and you'll understand why the one who has to do the cleaning prefers the simple Sharples Tubular.

There are other advantages just as much in favor of the Tubular. Write today for catalog V 300—it tells you all about the gain, use, and choice of a separator.

The Sharples Separator Co.
West Chester, Pa.
Toronto, Can. Chicago, Ill.

Washed in 15 to 30 minutes

Detecting Lameness

We are given to neglecting the seemingly little things when in reality they may be of the greatest importance, writes a correspondent of the Horseshoer's Journal. How many of us fully understand the symptoms and cause of lameness of the different forms? Take as an illustration the exterior signs which foretell, or rather tell without making a search, that it is a corn which troubles the horse. Again, how many of us know the difference in signs of lameness within the hoof and that which is above it? We get corn, navicular disease, contraction, etc., within the hoof, and the horse is lame. So, too, he is lame when a tendon becomes ruptured or a muscle in the shoulder becomes strained. Now as each cause has a different effect, so has the lame shoulder or tendon a different effect on the horse that corn, etc., and when he travels he shows it. A corn or navicular disease in the foot will make a horse travel widely different than if it is a strained tendon or muscle that effects him; yet how many of us know the symptoms of either; how many can tell what the trouble is by watching the horse move? Not many, I believe.

So we follow up this subject of lameness which I dropped some months ago, but this time we will take up the front part only and look into the inside through what can be seen from without and try to learn something about the subject.

Side Bone.—When walking, weight is chiefly borne upon the toe, which is put to the ground first; the animal steps lightly upon the posterior half of the hoof, and the lower joints show more or less flexion. When both feet are diseased the gait is stiff and the animal takes short steps. Inspection of the shoe shows least wear over the diseased quarter. Quite often contraction of the wall at the quarter of the afflicted side is apparent, and the wall is ridged.

The seat of the lameness is readily recognized when ossification is complete. To test the elasticity of the cartilages the foot is raised, the thumbs placed upon the inside and outside quarters respectively, and the other fingers, resting against the upper border of the cartilages, pull them in an outward direction. Any difference in the elasticity of the cartilage is thus easily detected. This test is of no value when only the lower portion of the fibro cartilage is ossified, and the diagnosis then often becomes uncertain. If pressure upon the corresponding portions of the wall fails to produce pain, the diagnosis of the side bones can only be pronounced when all other lesions, which might excite similar lameness, are excluded.

Corn.—The wall at quarter is often covered with ridges which do not run parallel with the coronary border. In severe cases the animal will be seen lifting his foot from the ground. This is so especially during extreme cold weather, showing that there is close affinity of relationship between the human and animal disease. The seat of the trouble being exclusively in the heels, a look at the shoe will show the toe part worn mostly. In traveling the horse will put his toe most firmly to the ground before

landing on the heels, and in standing he will advance the foot much the same as in case of lame shoulder.

Quittor.—In the case of quittor or suppurated (mattered) corn, the heel will present much, and in the case of severe trouble, intense heat. Quittor is simply the result of corn aggravated, and in extreme cases the animal cannot be worked.

Laminitis.—This is a disease beyond the successful treatment by the horseshoer, and very often beyond that of the veterinarian. In the standing posture the body may sway back and forth, an expression of pain and fatigue. The hind legs are unduly advanced under the belly and the fore legs are kept in front of the chest, with the extensor muscles slightly flexed. The weight of the body is chiefly sustained by the heels of the hoof, and the head and neck are elevated. When forced to move the fore feet take short steps, as it anxious to get out of the way of the hind legs. The hind quarters sway to and fro, the fore feet touch the ground, heels first, and the sole of the hoof can be plainly seen by standing in front of the animal as it walks. The foundered hoof produces a double hoof beat, the first being due to the striking of the ground with the heels, the second to the coming down of the toe. If the hind feet are foundered, which is rarely the case, all four feet gather under the belly in a bunch. Foundered horses when lying down require some persuasion to get up. When down they occasionally groan, look to one side, and draw up first one and then the other foundered leg. In slight cases the animal, when walking, is merely stiff, and such animals in resting frequently hold up the foundered feet alternately. Such cases, turned quickly on hard ground, show an immediate and material increase of lameness. Should all four feet be foundered, the animal lies down constantly. In cases of chronic founder—that is, those where the os pedis is dislocated—distinct changes in the form of the hoof are evident. The coronary region is depressed, and, as a consequence, the anterior region of the wall of the hoof becomes more or less concave and is covered with ridges diverging toward the quarters. Such a hoof after some time is longer than wide, the sole is convex, and there is supporting-leg lameness with permanent forward pointing of the leg; the heels always touch the ground first, and thus in walking slowly the double beat, mentioned before, is quite evident.

The Plantar Cushion.—Lying directly underneath the horny frog is the plantar cushion (sensitive frog). In quittor and when inflammation is present, this body of fibrous tissue becomes attacked quite easily and lameness may often be traced to trouble located in this region. A hoof tester, or the hammer used on the frog or at the sides of the hoof is the best means to employ to detect the source of trouble. Quite often by pinching the frog it will be found to readily yield. Heat will be found around the back of the hoof and at heel above horny frog and indeed the entire exterior of hoof will show a disposition to heat and, to the

touch, soreness.

Navicular Lameness.—The horse points forward when standing still. When first taken out goes lamer on hard than on soft ground, but gradually drives out of his lameness. In standing the flexion takes place at the ankle joint. When both feet are involved, the weight is shifted from one to the other foot, first one, then the other being pointed. In traveling the tendency is to dig the toe into the ground; stumbling is likely. The horse will retain his feet on the ground as little as possible; sweating caused by the intense pain, is frequently apparent when the horse travels; lameness is most apparent when the horse travels on the hard ground.

Inspection of the case shows much heat in the hollow of heel; there is much pulsation generally, pushing the thumb into the hollow of the heel will sometimes detect the trouble; a tongs tester used with one jaw on the side of the frog and the other on outside wall near toe will by pinching cause the horse to yield. This is so particularly when the sole and bars are weak, but where strong they should be pared away, otherwise yielding to this pressure may not be noticed.

Strained Tendon.—Inflammation, a touch of the parts easily detecting this; a slight pressure of the thumb and finger; a decided resting of the toe on the ground; a swelling of the affected part; short labored movements. These are the pointed symptoms of strained tendon, but another is the light wear which the shoe on the affected side will be seen to have undergone, the animal having saved the side as much as possible, should he be kept at work, as is sometimes the case with careless or perhaps inhuman devices.

Shoulder Lameness.—In moving the leg is carried forward slowly, often describing an outward circle; the toe is often seen tripping; going up hill or trotting in a circle with the lame leg on the outside of the circle, the lameness increases; the head nods decidedly, the animal backs with difficulty, dragging the leg after him. On soft ground the lameness appears at its worst; when standing the toe is often rested and sometimes the standing position of the lame leg is firmly set on the ground.

Shoulder lameness may be traced to the shoulder joint or the muscles. In the former, in cases of long standing, a shrinking of the shoulder muscles will be noticed; in the latter muscular lameness, swelling may be noticed.

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Ticks and lice cause tremendous loss. Save your sheep from these attacks. Dr. G. Howard Davison, of Millbrook, N. Y., one of America's most famous Shropshire sheep breeders, tells us he always uses Zenoleum for dipping his flock. It is made by the Zenner Disinfectant Company, 49 Lafayette Ave., Detroit, Mich. A gallon costs \$1.50, express paid, and is enough to dip one hundred sheep. After dipping, what remains can be used for disinfecting the stables. A "Veterinary Adviser" telling the whole story can be had free for the asking.

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Write us fully stating your present occupation and experience with live stock.

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International Consolidated Record Association

A. T. ANGELL, President

PENN YAN, N. Y.

BLOODED STOCK

\$1075 for a Jersey Bull Calf.

(Continued from page 1)
Hood Farm Rex, were included in the sale, and were in demand. Hood Farm Rex was exhibited in the sale ring and was enthusiastically admired by breeders.
The sale was a decided success and proved that buyers appreciated the opportunities offered by Hood Farm in allowing them to obtain the best blood in the World at their own prices. It exceeded in interest and importance the sale held in 1902 when the bull and cow that afterward won champion and grand champion prizes at the St. Louis World's Fair were sold at auction by Hood Farm. It will certainly be of great benefit to have stock of this rich breeding scattered so widely over the country.

SALE DATES

- Poland-Chinas.**
Aug. 22—E. L. Jimison, Oneida, Ill.
Sept. 15—White and Metzger. (Sale at Council Bluffs, Ia.)
Sept. 22—Dr. H. Pritchard, Wisner, Neb.
Sept. 27—Ed. Holmes, Bedford, Ia.
Sept. 27—Jas. B. Turbett, Hanna City, Ill.
Sept. 28—E. E. Leighton, New Market, Ia.
Sept. 28—Prouty & Keeline, Council Bluffs, Ia.
Sept. 29—Rood & Fesenmeyer, Clarinda, Ia.
Oct. 2—C. J. Gabel, Louisville, Neb.
Oct. 3—William Penningroth, Tipton, Iowa.
Oct. 4—M. Bradford, Rosendale, Mo.
Oct. 5—Bergen Bros., Stanton, Ia.
Oct. 5—O. F. Applegate, Oakland, Ia.
Oct. 6—D. C. Lonergan, Florence, Neb. (Sale at Council Bluffs.)
Oct. 8—R. E. Williams, Oakland, Ia. (Shorthorns).
Oct. 8—E. E. Axline, Oak Grove, Mo.
Oct. 8—Wurtzel Bros., Beemer, Neb.
Oct. 9—A. J. Johnson, Oakland, Ia.
Oct. 9—Ira Cottingham, Eden, Ill.
Oct. 9—O. E. Wade, Rising City, Neb.
Oct. 10—R. A. Sanman, Glasford, Ill.
Oct. 10—C. S. Price, Carson, Ia.
Oct. 10—W. D. Fulton, Villisca, Ia.
Oct. 11—J. O. James, Braddyville, Ia.
Oct. 13—C. Q. Miller, Conway, Ia.
Oct. 15—Fleming & Schrader, Arbor Hill, Ia.
Oct. 15—A. J. Bunn, Kent, Ia.
Oct. 16—J. H. Wintermute, Blockton, Ia.
Oct. 16—Chas. E. Ogg, Auburn, Ill.
Oct. 17—J. H. Harvey & Son, Maryville, Mo.
Oct. 17—Williams Bros., Villisca, Ia.
Oct. 17—Ferd Friedly, Verdon, Neb.
Oct. 17—W. A. Pruitt, Asherville, Ks.
Oct. 17—J. L. Ewart, Grant City, Mo.
Oct. 18—W. A. Davidson, Simpson, Kan.
Oct. 18—P. C. Miller, Conway, Ia.
Oct. 19—Ed. Blauer, Mt. Ayr, Ia.
Oct. 20—W. R. Dowling, Norcatut, Kan.
Oct. 20—H. C. Whitrock and Wm. Reischick, Falls City, Neb.
Oct. 23—J. M. Frazier & Sons, Fort Crook, Neb.
Oct. 24—C. Lionberger, Humboldt, Neb.
Oct. 24—F. L. Rood, Clearfield, Ia.
Oct. 24—J. L. Miller & Sons, Brooklyn, Ia.
Oct. 24—T. F. Walker, Alexandria,
- Neb.
Oct. 24—F. A. Dawley, Waldo, Kan.
Oct. 25—D. W. Bingman, Clay Center, Kan.
Oct. 25—Jno. R. Triggs, Dawson, Neb.
Oct. 25—D. O. Miller, Eldora, Ia.
Oct. 27—J. C. Meese, Comstock, Neb.
Oct. 30—J. M. Baker, Narka, Kan.
and W. L. McNutt, Ord, Neb. (Sale at Grand Island, Neb.)
Oct. 30—G. B. Lobb & Son, Clay Centre, Neb.
Oct. 30—Leon Calhoun, Potter, Kan. (Sale at Atchison, Kan.)
Duroc Jerseys.
Oct. 4—H. A. Sexsmith, Greenfield, Ia.
Oct. 5—Arch Brown & Sons, Waterloo, Neb.
Oct. 5—F. A. Strong, Orient, Ia.
Oct. 5—Edgar Phillips, Onward, Ind.
Oct. 5—C. E. Kimm, Blairstown, Ia.
Oct. 6—H. C. Pfander, Clarinda, Ia.
Oct. 8—O. C. Unger, Forest, Ind.
Oct. 9—J. E. Smith, Victor, Ia.
Oct. 9—Frank Campbell, Tipton, Ind.
Oct. 9—August Voge, Portsmouth, Ia.
Oct. 10—F. H. Herring, Iowa City, Ia.
Oct. 10—Chas. G. McGinnis, Stuart, Ia.
Oct. 11—Grant Harris, Orient, Ia.
Oct. 11—F. M. Erchen, Odell, Ill.
Oct. 11—W. A. Foster, Greenfield, Ia.
Oct. 11—W. F. Stout, Delta, Ia.
Oct. 12—E. McGlasson, Princeton, Ill.
Oct. 12—E. J. Ewing, Bridgewater, Ia.
Oct. 12—Clark Tompkins, Shenandoah, Ia.
Oct. 12—C. Moore & Son, Kellerton, Ia.
Oct. 13—Aug. Sonneland, Harlan, Ia.
Oct. 15—Eikenberry & McNeil, Flora, Ind.
Oct. 15—A. Wilson, Bethany, Neb.
Oct. 15—Lynch Bros., Mt. Ayr, Ia.
Oct. 16—John M. Morrison, College View, Neb.
Oct. 16—Taylor & Son, Kokoma, Ind.
Oct. 16—L. L. Overholser, Diagonal, Ia.
Oct. 16—E. M. Castle & Son, Joy, Ill.
Oct. 16—T. P. Teargarden, Wayne, Kas.
Oct. 16—J. W. & Earl Taylor, Kokoma, Ind.
Oct. 16—M. S. Moats & Son, Randolph, Neb.
Oct. 17—W. A. Kirkpatrick, Lincoln, Neb.
Oct. 17—Z. I. Grout, Tingley, Ia.
Oct. 17—T. H. Isaac, Red Oak, Ia.
Oct. 17—John Black, Randolph, Neb.
Oct. 18—Hurlbutt & Rasmussen, Owaneco, Ill.
Oct. 18—Jacob Somsel, Galveston, Ind.
Oct. 18—C. A. Wright, Rosendale, Mo.
Oct. 18—Gilbert Van Patten, Sutton, Neb.
Oct. 18—Dewey & White, Shannon City, Ia.
Oct. 18—B. R. Miller, Randolph, Neb.
Oct. 18—J. O. Reece, Eldora, Ia.
Oct. 19—Geo. R. Manifold, Shannon City, Ia.
Oct. 19—Geo. Briggs & Son, Clay Center, Neb.
Oct. 19—W. C. Holmes, Osmond, Neb.
Oct. 20—H. G. Warren, Inland, Neb.
Oct. 20—Fred Snyder, Galveston, Ind.
Oct. 20—M. Mihills, Norfolk, Neb.
Oct. 22—M. W. Greer & Son, Rushville, Ill.
Oct. 23—H. S. Sheller & Son, Eldora, Ia.
Oct. 23—T. E. Laurie, Jacksonville, Ill.
Oct. 24—O. S. Gilbert, Conrad, Ia.
Oct. 24—Geo. W. Seckman, Ripley, Ill.

- Oct. 25—Manlove Bros., Bowen, Ill.
Oct. 25—L. P. Hovious, Cromwell, Ia.
Oct. 25—Balmat & Son, Mason City, Ia.
Oct. 25—Thomas & Hogsett, Golden, Ill.
Oct. 26—B. C. Marts, Polk City, Ia.
Oct. 26—Manlove Bros. & Griffiths, Bowen, Ill.
Oct. 27—A. P. Alsins, Boone, Ia.
Oct. 27—A. J. Stevenson, Mt. Ayr, Ia.
Oct. 27—Cutler, Reil & Cooper, Carthage, Ill.
Oct. 30—John Holste, Massena, Ia.
Oct. 30—McNeil Bros., Bowen, Ill.
Oct. 31—Fagan, Browning, Hess & McCabe, Ripley, Ill.
Oct. 31—C. W. Mathes, Bridgewater, Ia.
Nov. 1—E. D. Harris, Fontanelle, Ia.
Nov. 1—Ed. A. Baxter, Pawnee, Ill.
Nov. 2—J. S. Lovejoy, Falmouth, Ind.
Nov. 2—Fred Kraschel, Macon, Ill.
Nov. 3—J. Coy Roach, Girard, Ill.
Nov. 3—Ernst L. Humbert, Corning, Ia.
Nov. 3—Nash & Kimmons, Pickering, Mo. (Sale at Maryville.)
Nov. 6—Geo. M. McMurry, Maryville, Mo.
Nov. 6—F. M. Smith, Panora, Ia.
Nov. 7—Thos. Johnson, Columbus, O.
Nov. 7—H. B. Ayres, Eldora, Ia.
Nov. 8—S. S. Puckett, Yellow Springs, O.
Nov. 8—W. A. Staples & Son, Glidden, Ia.
Nov. 12—Geo. M. McMurry, Maryville, Mo.
Nov. 13—T. J. Hamilton, North Bend, Neb.

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I now have a largest stock of probably the best I ever owned. Cannot tell you all here, but I have Boars and Sows, all breeds, 2 to 6 months old, mated not skin; sows bred and boars ready for service. Guernsey Calves and Registered Scotch Collie Puppies. Write for prices and free circular. This stock must go and will be sold. M. B. Turkey, Barred and White P. Rocks, Brown Leghorns for sale.

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DIRECTORY OF BREEDERS' ASSOCIATIONS.

The following list comprises the name of every live stock breeders' association in the United States, of which we have record. The name and address of secretary will also be found in every case. If any associations of this kind are not listed, we ask that secretaries notify us at once, and also notify us at once as to any change in names and addresses. It will be the intention to keep this list up to date, and we ask for the co-operation of secretaries to that end.

Cattle Breeders.

American Aberdeen-Angus Breeders' Association—Thomas McFarlane, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

American Branch Association of the North Holland Herd Book—N. F. Sluiter, Brooklyn, N. Y., Secretary.

American Devon Cattle Club—L. P. Sisson, Newark, O., Secretary.

American Galloway Breeders' Association—Chas. Gray, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

American Guernsey Cattle Club—W. H. Caldwell, Peterboro, N. H., Secretary.

American Hereford Breeders' Association—C. R. Thomas, Stock Yards, Kansas City, Mo., Secretary.

American Jersey Cattle Club—J. J. Hemingway, New York, Secretary.

American Noarmandy Herd Book Association—E. G. Kramer, New York, Secretary.

American Polled Durham Breeders' Association—Fletcher S. Hines, Indianapolis, Ind., Secretary.

American Simmenthal Herd Book Association—E. G. Kramer, New York, Secretary.

American Short-Horn Breeders' Association—John W. Groves, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

American Sussex Breeders' Association—Overtown Lea, Nashville, Tenn., Secretary.

Ayrshire Breeders' Association—C. M. Winslow, Brandon, Vt., Secretary.

Breeders' Association of French-Canadian Cattle of the United States—W. J. McMurdy, Blinghamton, N. Y., Secretary.

Brown Swiss Cattle Breeders' Association—N. S. Fish, Groton, Conn., Secretary.

Dutch Belted Cattle Association of America—H. B. Richards, Easton, Pa., Secretary.

Holstein-Friesian Association of America—F. L. Houghton, Brattleboro, Vt., Secretary.

Maine State Jersey Cattle Association—N. R. Pike, Winthrop, Maine, Secretary.

National Polled Hereford Breeders' Association—A. E. White, Chicago, Secretary, 5629 Madison ave.

Red Polled Cattle Club of America (Incorporated)—Harley A. Martin, Gotham, Wisconsin, Secretary.

Horse Breeders.

American Association of Importers and Breeders of Belgian Draft Horses—J. D. Connor, Jr., Wabash, Indiana, Secretary.

American Breeders' Association of Jacks and Jennets—J. W. Jones, Columbia, Tenn., Secretary.

American Clydesdale Association—R. B. Ogilvie, Union Stock Yards, Chicago, Secretary.

American Hackney Horse Society—A. H. Godfrey, New York, Secretary.

Percheron Society of America—Geo. W. Stubblefield, Union Stock Yards, Chicago, Secretary.

American Saddle Horse Breeders' Association—J. B. Nall, Louisville, Ky., Secretary.

American Shetland Pony Club—Mortimer Levering, Lafayette, Indiana, Secretary.

American Shire Horse Breeders' Association—Charles Burgess, Wenona, Ill., Secretary.

American Stud Book (Thoroughbreds)—James E. Wheeler, N. Y., Registrar.

American Trotting Register Co.—W. H. Knight, Chicago, Secretary.

American Suffolk Horse Association—Alexander Galbraith, Janesville, Wis., Secretary.

Cleveland Bay Society of America—R. P. Sterlecker, West Orange, N. J., Secretary.

French Coach Horse Society of America—Duncan E. Willett, 2112 Michigan ave., Chicago, Secretary.

German Hanoverian and Oldenburg

BLOODED STOCK

Coach Horse Breeders' Association—J. Crouch, Lafayette, Ind., Secretary.
Morgan Horse Register—Joseph Battel, Middlebury, Vt., Editor.
National French Draft Horse Association—C. E. Stubbs, Fairfield, Iowa, Secretary.
Oldenburg Coach Horse Association of America—C. E. Stubbs, Fairfield, Iowa, Secretary.

Sheep Breeders.
American Angora Goat Breeders' Association—John W. Fulton, Kansas City, Mo., Secretary.

American Cheviot Sheep Society—F. E. Dawley, Fayetteville, N. Y., Secretary.

American Cotswold Association—Frank W. Harding, Waukesha, Wis., Secretary.

American Leicester Breeders' Association—A. J. Temple, Cameron, Ills., Secretary.

American Milch Goat Record Association—W. A. Shafor, Hamilton, O., Secretary.

American Oxford Down Association—W. A. Shafor, Hamilton, O., Secretary.

American Rambouillet Sheep-Breeders' Association—Dwight Lincoln, Milford Center, O., Secretary.

American Shropshire Registry Association—Mortimer Levering, Lafayette, Ind., Secretary.

American Southdown Breeders' Association—Frank S. Springer, Springfield, Ills., Secretary.

American Suffolk Flock Registry Association—George W. Franklin, Des Moines, Iowa, Secretary.

American Tunis Sheep-Breeders' Association—Charles Roundtree, Crawfordville, Ind., Secretary.

Black-Top Spanish Merino Sheep-Breeders' Publishing Association—R. P. Berry, Clokey, Pa., Secretary.

Continental Dorset Club—Joseph E. Wing, Mechanicsburg, O., Secretary.

Dorset Horn Breeders' Association of America—M. A. Cooper, Washington, Pa., Secretary.

Franco-American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.

Hampshire Down Breeders' Association of America—C. A. Tyler, Nottawa, Mich., Secretary.

Improved Black-Top Delaine Merino Sheep-Breeders' Association—O. M. Robertson, Eaton Rapids, Mich., Secretary.

Improved Delaine Merino Sheep-Breeders' Association—George A. Henry, Bellefontaine, O., Secretary.

International Delaine Merino Sheep Record—U. C. Brouse, Kendallville, Ind., Secretary.

International of Homeyer Rambouillet Club—E. M. Moore, Orchard Lake, Mich., Secretary.

Interstate and International Polled Dickinson Register—H. G. McDowell, Canton, O., Secretary.

Michigan Merino Sheep Breeders' Association—E. N. Ball, Hamburg, Mich., Secretary.

National Delaine Merino Sheep-Breeders' Association—John B. McClintock, Cannonsburg, Pa., Secretary.

National Lincoln Sheep-Breeders' Association—Bert Smith, Charlotte, Mich., Secretary.

National Merino Sheep Register Association—R. O. Logan, California, Mich., Secretary.

National Shropshire Record Association—S. J. Weber, Middleville, Mich.

New York State American Merino Sheep-Breeders' Association—J. Floratio Earll, Skaneateles, N. Y., Secretary.

Standard American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.

Standard Delaine Spanish Merino Sheep-Breeders' Association—S. M. Cleaver, West Brownsville, Pa., Secretary.

United States Merino Sheep Registry Association—J. A. B. Walker, Mount Air, Pa., Secretary.

Vermont Merino Sheep-Breeders' Association—C. A. Chapman, Ferrisburg, Vt., Secretary.

Swine Breeders.
American Berkshire Association—Frank S. Springer, Springfield, Ills., Secretary.

American Duroc-Jersey Swine Breeders' Association—S. E. Morton, Camden, O., Secretary.

American Essex Association—F. M. Stout, McLean, Ills., Secretary.

American Poland-China Record Co.—W. M. McFadden, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

American Tamworth Swine Record Association—E. N. Ball, Hamburg,

Mich., Secretary.

American Hampshire (Thin-Rind) Swine Record Association—E. C. Stone, Armstrong, Ill., Secretary.

American Yorkshire Club—H. G. Krum, White Bear Lake, Minn., Secretary.

National Poland-China Record Co.—A. M. Brown, Winchester, Ind., Secretary.

International Record Association Co.—H. A. Jones, Penn Yan, N. Y., Secretary. International for all breeds and countries.

Cheshire Swine-Breeders' Association—R. B. Radger, Ouquaga, N. Y., Secretary.

Improved Small Yorkshire Club of America—F. B. Stewart, Espesville, Pa., Secretary.

National Berkshire Record Association—E. K. Morris, Indianapolis, Ind., Secretary.

National Chester White Record Association—Thomas Sharpless, West Chester, Pa., Secretary.

National Duroc-Jersey Swine-Breeders' Association—Robert J. Evans, Peoria, Ill., Secretary.

O. I. C. Swine Breeders' Association—C. M. Hiles, Cleveland, O., Secretary.

Southwestern Poland-China Record Association—H. P. Wilson, Gadsden, Tenn., Secretary.

Standard Chester White Record Association—W. H. Morris, Indianapolis, Ind., Secretary.

Standard Poland-China Record Co.—George F. Woodworth, Maryville, Mo., Secretary.

United States Small Yorkshire Association—D. T. Bascom, California, Mich., Secretary.

Victoria Swine-Breeders' Association—H. Davis, Dyer, Ind., Secretary.

American Chester White Record Association, Earnest Freigau, Dayton, Ohio, Secretary.

FINE DUROCS AT PUBLIC SALE.

John Schowalter, the enterprising and one of the best breeders of Nebraska, is going to sell at Cook, Neb., September 27, one of the finest, if not the best, bunch of fine Duroc-Jersey swine that ever went through a sale ring. This offering has great attractions; it includes Golden Banner 40497, the fine yearling boar sired by the first prize yearling at St. Louis World's Fair. He is a fine one, will make a very large hog and a good breeder; the smallest litter he ever sired was eight pigs. Banner Top, 119100, sired by Champion Tip Top Notcher 20729, is a fine large yearling sow and should go into the best herd in the land.

Crimson Wonder Belle, 119096, sired by the great Crimson Wonder, is a fine yearling sow and good producer. Queen Cedarvale, 119090, sired by Golden Rule 14101, is a fine yearling sow, and bred for early fall litter. West's Diamond, 119106, sired by Noble Ring, 35041, is a good one—a yearling of best brood sow type. Miss Major R., 119104, sired by Major R., 23163, is a good yearling sow—raised ten fine pigs this spring. Red Cedar, 119094, sired by Royal Triumph, 34581, is a top yearling sow and good producer also.

There are other breeds, all of the very best blood lines, such as Improver 24, Coles Duroc and others. All tried sows have raised large litters—10 yearling sows sired 92 live pigs. The spring pigs that go in this sale are only the tops of the Golden Banner Herd—about 45 or 50—both males and gilts. They all combine quality and size and will weigh about 200 pounds in smooth condition at 6 months old, and will make fine producers.

Try to arrange early to attend this great Duroc sale—it will be an important event in south-eastern Nebraska. Don't forget the date—September 27th. Catalogues will be out about September 1st. Send your name now for mailing list and you will receive one. You can send your bids by mail also and you will be treated right. For any other information write the proprietor, John Schowalter, Cook, Nebraska.

Wedo all kinds of Job Printing. Send us your work, it will be promptly done. Write us about it.

Weak Bone in Hogs

A Union County Guide subscriber wants to know what is the cause of the "going down" of one of his brood sows. He says the animal is "down and unable to stand" and that he had two in the same condition last year. He has used medicine, but to no avail.

This kind of complaint reaches us very often and we have time and time again had something to say about it in the columns of the Farmers' Guide. Undoubtedly, the trouble is caused by improper care and feeding.

There are several things that may lead to this trouble, and it is not always easy to discover just which one or how many enter into a particular case.

However, from the fact that the animal is unable to support herself upon her legs is quite conclusive evidence that these members are weak and unable to stand the weight they ordinarily should.

This being the case there must be something lacking in the bone construction. You, no doubt are acquainted with the different elements which go to make up different parts of the animal body, and know that to have a perfect physical construction of each member thereof, the daily ration must be made of such foods that will supply these elements in their right proportions.

The different elements are called by certain terms which are also probably familiar to you, such as protein, carbohydrates and fats. The first of these you are no doubt aware has a special office to perform in the bone and muscle construction of every animal body and without sufficient amount of this element in the daily food, the body is almost certain to show a weakness in these parts.

Without sufficient protein the bones and muscles can not be developed in the strong way that they should. When such is the case they are almost certain to give way sooner or later and let the animal "down," as it is commonly termed by stockmen. Your sow shows every symptom of such trouble. She has undoubtedly been fed from birth upon feeds that contain too little of the required element, protein. Perhaps corn has been her chief ration and under such circumstances there is almost always more or less serious trouble of this kind.

Corn is a feed particularly lacking in protein and when fed in excessive amounts, or with little or no supplementing by other feeds which are the opposite in character, there is a great likelihood of weak development in the bone of the animal. Another thing which may have something to do with the proper growth and development of the bone and muscle of the animal is the lack of proper exercise when young. This factor, together with excessive corn feeding, is probably the most common cause of such condition as illustrated in your description of your brood sow.

There is no cure which can be recommended in such a case. The only thing to do is to see that the affected animal has the proper kind of food and that all young animals are cared for and fed in such a way that their physical development may not be lacking. Be careful to feed other feeds besides corn, such as milk,

middlings, bran, etc. Also see to it that all growing animals have plenty of good pasture range during the growing season of the year, and are never confined in a small pen with no chance of getting a good amount of daily exercise. It is also well to supply the animals with such mineral elements as are contained in charcoal, ashes, etc. These elements go to make up certain parts of the body and without them the development is incomplete. When having a good range the animals are more likely to secure the supply of such unnatural foods and there is not such necessity of providing special substances for them.

Farmers as a class are altogether too prone to take the interest that they should in planning the feeding rations of their animals. Too many seem to be frightened by some unfamiliar words which are used to explain the elements contained in the foods and are more or less indifferent about paying much attention to this part of their business. This is certainly a mistake and we are glad to say that the younger farmers and those who are the most progressive are using more common sense in their methods upon the farm. The day is coming when the balanced ration will be the only one used by farmers. Then, and not until then, will there be a time when such complaints as the breaking down of pigs, which is quite common to-day, will cease to be.—Farmers' Guide.

FEED THE BROOD SOW.

It is quite a popular practice among farmers, and even breeders, in holding over the brood sows, to let them rough it through the summer months. That is they are turned out in the rape patch, a clover field, or behind a bunch of feeding steers and are obliged to rustle during these warm months, during which time they become quite thin. There was a time when we thought this good policy, but we have changed our mind materially. Upon this treatment the brood sow not only deteriorates in flesh condition, but physical condition also. She loses vitality, and while she may get in pig just as easily when the breeding months roll around, the chances are ten to one that she will not raise a strong litter. We do not encourage the fattening of brood sows at any stage of the game, but we do think they should be kept in strong breeding condition. The raising of a litter of pigs is a great drain upon the sow, and unless this strength is regained during the periods of rest, the chances are that recuperation in physical strength will not have been sufficient to insure the proper vigor for producing and raising a litter of good strong pigs.

And there is another phase of this subject that should not be overlooked—in every herd a certain number of gilts are worked into the breeding operations each year. These gilts are usually about one year old at time of farrowing, and by the time they have raised a litter of from five to eight pigs they have become so depleted in flesh that one almost feels ashamed that he bred them so young. This may be overcome, however, to

a very great extent by growing these young sows during the summer months. It is surprising the gains that such sows will make if given a proper chance.—Nebraska Farmer.

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Properties and Business of all kinds sold quickly for cash in all parts of the United States. Don't wait. Write to-day describing what you have to sell and give cash price on same.

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Exceptional advantages to introduce our
LINCOLN SHEEP } to readers of
CHESTER WHITES } this paper
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Write your wants immediately. Special offering Scotch Collies and Chester Whites now on hand.



Chester Whites
For years I have been selecting and breeding to build up a herd that would be uniform in shape, stamping other herds with the good qualities that I had succeeded in fixing in my herd. If in need of first-class Chesters come and see me or write your wants. Only the best sold for breeders.

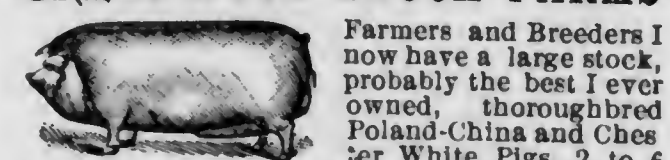
T. A. STEVENSON, Shannon City, Ia.



ENON HERD
CHESTER WHITES
Have some extra choice Fall pigs, both sexes. If you are looking for good ones write me. Barred Plymouth Rocks, best strains. Birds for sale. Eggs in season.

D. W. SHELLABARGER, - ENON, OHIO

Bursonville, Bucks Co., Pa. GREENWOOD STOCK FARMS



Farmers and Breeders I now have a large stock, probably the best I ever owned, thoroughbred Poland-Chinas and Chester White Pigs, 2 to 6 mos. old, sows bred, boars ready for service, all from prize winning stock. Guernsey and Jersey Cattle. Buff and Barred Plymouth R. Chickens.

Farms and Residence, Greenwood, Pa.
Address C. H. DILDINE,
Route No. 1, Rohrsburg, Pa.



POLAND-CHINAS
of Best Strains

CHEAP
Pigs by Mo. Black Mischief Maker 3711 and Siefker's Sunshine 10149. Dams are by 10 different noted boars. I have shipped to 19 states. Satisfaction guaranteed. Write for circulars and particulars before you buy.

A. F. SIEFKER
St. Charles Co., DEFIANCE, MISSOURI

Pig-feeding Experiments

Bulletin No. 67, Missouri Experiment Station, reports experiments made in feeding pigs. Fifteen lots of 6-months-old pigs, usually five in each lot, were fed, most of them for ninety days, in a comparison of wheat-middlings, linseed-oil-meal, cottonseed-meal, gluten-meal, gluten-feed, and germ-oil-meal used as supplements to cornmeal in dry-lot feeding during the month of December, January, February, and March, 1904-5. Two more lots were fed a year later, during November, December, and January, 1905-6, in a comparison of ear-corn and cornmeal, both being fed with linseed-oil cake. The following is the summary of the results:

1. The rations of linseed-oil-meal and cornmeal in proportion of 1 to 5 were eaten in larger quantities than any other feeds tested, and made more pork, with smaller expenditure of feed, than any other ration involved. Estimating the cost of linseed-oil-meal at \$30 per ton, corn at 30 cents per bushel, grinding at 10 cents per hundred-weight, and wheat-middlings at \$18 per ton, the cost of pork made from the oil-meal rations average 11.3 per cent. less than from the rations of cornmeal and wheat-middlings. The average cost per 100 pounds with the oil-meal rations was \$3.23, and with the middlings rations \$3.60, or a difference of 37 cents per 100 pound of pork in favor of the oil-meal rations. In order to make pork from cornmeal and wheat-middlings as cheaply as from the above-mentioned ration of cornmeal and linseed-oil-meal, the middlings would have to be bought at prices ranging from \$14.70 to \$15 per ton in the various lots. Middlings are usually more expensive, and the linseed-oil-meal is usually less so than as here figured.

With corn at 25 cents per bushel, it would be an even thing, so far as cost of grain was concerned, whether one would feed it alone or with oil-meal at \$30 per ton as in lot 15; with corn at 29 cents per bushel, there would be no saving or loss from the feeding of middlings with corn as in lot 14, allowing in each case ten pounds of pork per buhel of corn fed alone.

2. The rations of cornmeal and wheat-middlings, half and half, required from 13 to 14 per cent more grain to produce a given weight of pork than the ration of cornmeal and oil-meal in proportions of 5 to 1, and made from 19 to 27 per cent less pork in a given time.

3. The rations of cornmeal and wheat-middlings in proportions of 2 to 1 required from 16 to 23 per cent more grain in the production of pork than corn and oil-meal, in the proportions of 5 to 1, and made from 22 to 32 per cent less pork in a given time.

4. Cornmeal and fermented cotton-seed-meal fed in the proportion of 8 to 1 killed three out of fifteen hogs at the end of 51 days' feeding. The gains up to that time had been moderate in extent and cost. The hogs did not relish this feed. A change to the corn and oil-meal ration induced much greater consumption of grain, increased the gains in weight 39 per cent, and reduced the grain requirement per pound of in-

Experiments

crease to the extent of 13.1 per cent.

5. An attempt was made to cheapen the cornmeal and linseed-oil-meal ration by a substitution of gluten-meal, gluten-feed, and germ-oil-meal in three rations respectively for half of the linseed-oil-meal in the standard 5 to 1 ration. In each case the amount of food eaten and the rate of increase were lowered by the substitution, and the amount of grain requisite to the production of a pound of pork was increased. The ration containing a gluten-feed was eaten in greater quantity and was used with better effect than the rations containing gluten-meal or germ-oil-meal. The ration containing gluten-meal was eaten in the smallest quantity and returned the least pork for the feed consumed.

6. Cornmeal five parts and oil-cake (pea size) one part, fed dry and mixed, produced gains in weight with nine per cent less gain than did ear-corn and oil-cake fed separately, both dry. The gain in the cornmeal lot was 28.6 per cent greater than in the ear-corn lot. The hogs receiving ear-corn would not eat more than one-sixth as much oil-cake as corn (the cob figured out), when both were allowed ad libitum.

7. The pork produced in these experiments cost more than was made in the previous trials reported in Bulletin 65, because of the severe winter weather prevailing, and because the hogs used had been raised on grain-feed with very little use of pasture.

A SQUARE DEAL.

Kendalls, Wis., April 11: By special dispatch: The following telegram tells how three separator manufacturers met an earthquake that jarred the ground under their feet.

Kendalls, Wis., April 11th. The Sharples Separator Co., Chicago: "In the presence of forty dairymen, Tubular won big contest here, yesterday, over three competitors. Sold committee six sixes." Maire.

Mr. Maire is the traveling representative of the Sharples Separator Co., of West Chester, Pa., Chicago, Ills., and Toronto, Canada, manufacturers of the famous Sharples Tubular Cream Separator. The Sharples Separator Co. certainly seems to have things their own way, easily winning all public contests in which they enter their machines. This contest certainly proved an earth-

quake to the three defeated competitors, as Mr. Maire's telegram says they were not only defeated but that six of the popular number six Tubular Cream Separators were sold on the spot as a result of this contest.

EVERGREEN FARM Berkshires, Gilts br d. Spring pigs. Herd headed by Baron Longfellow 8th, 85589, half brother to the World's Junior Champion. **GEO. EDDY,** Malone, N. Y.

Primrose Herd Large English Yorkshires.

From Imported Stock. Second to none. Write wants. **A. A. BRADLEY,** Frewsburg, N. Y.

CHESTER WHITES

Jerry S. 13167 at head of herd, sired more prize winners at Iowa State Fair than any other hog making an exhibit. Guaranteed satisfaction and it is satisfaction that satisfies. Try me.

J. H. MAHANNAH, North English, Iowa

CHESTER WHITE BREEDERS

I have 5 service boars, 6 sows ready to breed one 30 spring pigs, as fine as I ever owned and the most prolific. Write me.

LEWIS BAKER, Christiana, Pa.

CHESTER WHITES AND POLAND-CHINAS.

20 choice Spring Sows, open; 25 Fall Pigs, both sexes, and also some very fine yearling bred sows that are extra fine and were prize winners last Fall. 12 head Poland-Chinas from 3 to 12 months old. I never had a better offering in young sows than this.

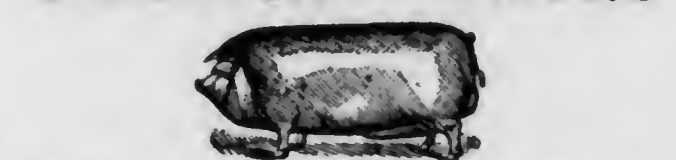
C. R. CRESSMAN, Bursonville, Bucks Co., Pa.



Chester Whites
I have them combining the best blood in Chester County. If you want the good old Chester that has made this county famous, we have them here that will please you. We breed and sell only the best. Write me.

L. WEBSTER, - Kelton, Pa.

SPRING PIGS CHESTER WHITES



Bred right, Fed right, Priced right. Come and see them, as good as any herd in Penna. Can please you.

J. H. YARNALL, Kelton, Pa.

NOTICE

On October First 1906 and after all Live Stock Recording will be transacted at Regular Rates Gonly. All previous offers will be withdrawn.
Dated July 1906

International Consolidated Record Association

A. T. ANGELL, President

PENN YAN, - - - **NEW YORK**

BLOODED STOCK

The Great Sale at Syracuse, N. Y., of Holstein-Fresian Cattle.

The Breeders' Consignment Sale Co., seven gentlemen, most of whom are prominent in the Board of Officers of the Holstein-Fresian Association of America, and by name A. A. Cortelyou, Stevens Brothers, Hastings Co., F. P. Knowles, Wing R. Smith, H. A. Moyer, T. A. Mitchell and J. W. Dimock of "Woodcrest" farm, held their sixth public sale on June 7 and 8 last, on the State Fair Grounds at Syracuse, N. Y. It was by far the most notable and important of the sales of this company of Holstein breeders, not only in the quality of the cattle but in the prices obtained, singly and in the general average. The highest price, \$2600, was obtained for a 6 year-old cow, of Mr. H. A. Moyer's consignment, and which had just completed a sensational A. R. O. test of 26.06 pounds of butter in seven days. Mr. J. W. Dimock of "Woodcrest" farm was the buyer.

Preparation for the sale details was ample and complete, under the management of Mr. S. D. W. Cleveland of Syracuse. The catalogue was a large and splendidly printed one, and contained detailed chart pedigrees of 164 animals, about each of which, and their ancestry, immediate and collateral, for three generations, Mr. Cleveland had supplied every known fact and record. In the introductory of this remarkable collection of pedigrees Mr. Cleveland says to the lovers of the Black and Whites:

"It is with considerable gratification that I present this catalogue for your kind consideration, for it contains the pedigrees of the best offering that it has ever been my pleasure to catalogue, both as to breeding and official records. The number of domestic bred animals catalogued, is one hundred and thirty-two, including males, calves, and young heifers. Seventy-five of these have made official records as follows: 22, two years old, average butter, 13.14; 18, three years old, average butter, 15.14; 10, four years old, average butter, 18.32; 25, full age, average butter, 19.33; 12 have records over 20 lbs., 2 have records over 25 lbs., 1 has record over 26 lbs. You gentlemen will know that a breeder must have considerable nerve to place this class of stock in a public sale."

"The offering of imported cattle, consisting of thirty-one head, made by Mr. F. P. Knowles, Highlawn Farm, Auburn, Mass., is without doubt the best lot of imported cattle ever placed in a public sale. Previous to 1903 there had been no cattle imported from Holland for over twelve years; of those imported in three years thirty have made official records as follows: 13, 2 years old, average butter, 12.04; 6, 3 years old, average butter, 15.64; 2, 4 years old, average butter 16.61; 9 full age, average butter, 18.07. One of these, Pieterje 22d, was sold in our June, 1904, sale for \$1200, to Woodcrest Farm, Rifton, N. Y. She has since made the largest record ever made by an imported cow and the largest four and six months' records ever made by any cow, either imported or domestic. Mr. Wing R. Smith, Syracuse, N. Y., who has selected a great many

animals in Holland, says that this bunch is the finest he ever saw. Quite a few of this offering have made official records which will be announced as they are placed in the ring. I want all you good people to be present at this sale; even if you do not make a purchase you may learn something."

Indeed, all Mr. Cleveland's "say so" appears to hold good, to the great delight and satisfaction, not only of himself, the energetic auctioneer, Mr. B. V. Kelley, but of those present and the breeders generally. The average price was fine; that for cows \$277, stands unequalled in the animals of sales at auction, and it is undoubtedly true of the average for yearling heifers and calves. Breeders believe the sale the most successful ever held and that it marks an era of widespread interest in the breed, the extent of which has never before been equalled. In the presence of a crowd varying from 250 to 350 people, comfortably seated beneath a large tent, 159 animals were sold to 65 buyers for \$36,895.

The interest and enthusiasm were marked and intense; at least four people opened the sale of the \$2,600 cow with bids of \$1,000 each, among them Mr. Dimock, Mr. Field, Mr. Winters, Mr. Gordon, Mr. Marcou. During the bidding on this most perfect six-year-old cow, Mr. C. S. Averill, the owner of "The Milk and Butter King," a royally bred bull, confidently believed to be the greatest coming sire and whose service is held at \$500, offered a free service of this bull and \$1000 for the resulting calf at four weeks old. A new England breeder, General Charles W. Wood of Worcester, Mass., the owner, with Mr. Knowles, of the great sire, "Canary Mercedes' Son," met this offer with a similar one of service of his bull free and \$1500 for the resulting calf. The bids rose quickly, fifty, one hundred, two hundred dollars at a time and closed with the splendid offer of the proprietor of Woodcrest, Mr. J. W. Dimock, at \$2600 for this daughter of Paul Beets De Kol. In this Mr. Kelly's outstanding merit and ability as an auctioneer was especially noticeable, and brought him much praise and congratulation. And to Mr. Moyer, the contributor and developer of this great cow was freely accorded the great success of the sale.

We give the list of sales in full below, stating also the butter records of the cows, classified as cows, two-year-olds, yearlings and calves. Also by consignments, in detail each purchaser.

Mr. A. A. Cortelyou's offering brought \$6,680 for 22 head and averaged over \$303 each. His nine cows averaged over \$244; four three-year-olds averaged \$235; eight 2-year-olds averaged \$422.

Stevens Brothers-Hastings Co., entered 30 head which sold for \$5,230, an average of \$174. There yearling heifers averaged \$212.50; cows \$204, 2 year-olds \$171, 3 year-olds, \$152; 1 yearling bull, \$105; 1 bull calf, \$120.

Woodcrest Farm offered 18 head that sold for \$3,445, averaging \$191 per head. There cows averaged \$197

yearlings \$212.50; 2-year-olds, \$112.50 3-year-olds, \$150.

Mr. Wing R. Smith's lot of 19 brought him \$3,005, averaging \$153. The cows averaged \$173, 3-year-olds, \$145, 2-year-olds \$152, yearlings \$123.

Mr. A. F. Mitchell, Weedsport, N. Y., offered 25 head which realized \$4,715. One yearling bull brought \$135 and two young calves averaged \$160, 2-year-olds, \$140, 3-year-olds, \$161, and cows \$235.

Mr. A. H. Moyer's entry of 14 head averaged \$389, and realized a total of \$5,450. Eight cows averaged \$555; one three-year-old, \$225; 3 3-year-olds, \$160; two bulls, about one year old, \$172 each.

Mr. F. P. Knowles' consignment of 28 head was largely imported from Holland. There were ten calves in the lot, most of them just born, and the sale total was \$8,070. Five cows not catalogued brought \$129 average. Thirteen cows averaged \$380 each; two yearlings, \$185 each; five two-year-olds, \$309 each. The entire lot of imported cattle, catalogued 26 head, sold for \$7,725, and with the five calves just dropped, which sold for an average of \$129 each, the total was \$18,370. The 14 imported cows averaged \$380 each; the 2-year-olds \$315 each, and yearlings \$85 each.

The grand totals show 74 cows sold \$20,490; 19 3-year-olds, \$3,325; 9 yearlings, \$1,520; 29 2 year-olds, \$6,955; and ten bull calves, \$1,315. Seven heifer calves averaged \$144 each.

The lesson to be learned is simply that these are the auction values for strictly high class cattle. In their owners' barns much larger prices would generally be obtained.

Mr. A. A. Cortelyou bought three head for \$710. Mr. H. A. Moyer took three at \$785. Mr. F. P. Knowles bought three at \$580. The Stephens Brothers-Hastings Co., purchased five at \$1,100. Woodcrest Farm took home four for \$4,625. George C. Cary, St. Johnsbury, Vt., bought eight head for \$1,105. J. H. Mead, West Rutland, took 2 head at \$600. Carrabassett Stock Farm, North Anson, Me., bought most, 15 head for \$2,475. F. F. Walker, Burlington, Mass., bought a \$500 cow. H. T. Fuller, Peru, N. Y., four head at \$910. Herbert Barber, Plattsburg, N. Y., two head at \$520. Davis Bros., Clifford, N. Y., two at \$505. George D. Sherman, Port Henry, N. Y., two at \$1310. H. S. Cheney, Southboro, Mass., five head for \$730. H. S. Gorden, Kerhonkson, N. Y., three head for \$1,365. William Everson, Lake Mills, Wis., three for \$855. John B. Marcou, Princeton, Mass., four head at \$1025. J. A. Sanborn, New Woodstock, N. Y., four head at \$910. C. D. Thomas, Herkimer, N. Y., had the fourth largest bill, five head for \$1,410. Brown Brothers, Lyn, Ont., four head, \$830. Dr. W. T. Honsinger, West Chazy, N. Y., took five head at \$1,580. W. A. Waite & Son, Adams, N. Y., paid \$425 for four head. John Arfman, Middletown, N. Y., paid \$380 for three head. G. H. Ackerman, Milwaukee, Wis., three head for \$55. New Eng-

land bought a lot; 41 head for \$7510, an average of \$184 per head. Of these Vermont took 9 head and Maine 15; Massachusetts took 16 head at \$3330.

Breeders will be especially interested in noting the average prices obtained for offspring of those sires having many A. R. O. daughters. Doubtless these animals which find their way to the public sales are not the daughters of these great sires and there are hardly enough by any one sire to form any definite conclusion as to relative public esteem thereof.

Paul Beets De Kol, 22235, who was born March 1, 1895, is the sire of 59 A. R. O. daughters, 13 of which have records of over 20 pounds of butter in seven days. He has seven sons, who have sired 23 A. R. O. cows. He and his sire, De Kol's 2d's Paul De Kol, and his grandsire, Paul De Kol, had sired all together, 140 A. R. O. cows up to April 1 last. He has the largest number of A. R. O. daughters on this date. In this sale, Paul Beets' daughters, of which six were sold, of from five to nine years of age, brought a total of \$4,600, making an average of \$766.66 each. No other sire did anywhere near so well.

The one daughter of De Kol Burke offered brought \$425; he was a six-year-old.

Hengerveld De Kol was represented in the sale by only two young bull calves, which averaged \$242.50 each.

Canary Mercedes Son had a yearling bull and three bull calves, one to three months old, which averaged \$135 each.

Pieterje Hengerveld's Count De Kol's seven daughters, in age from three to seven years, brought but \$194 each average. They are not high record cows.

Lord Netherland De Kol had five daughters in the sale, from two to three years old, and they averaged \$190 each.

Homestead Vernon De Kol's two daughters that were sold averaged \$277 each.

Johanna Rue 3's Lad had three daughters at the sale and they averaged \$513 each; they were two and three-year-olds, and of high class style and appearance. The highest price was \$1000 for a two-year-old, dam Susie Vernon De Kol, 21.91 lbs., out of Sue De Kol, 25.31 lbs., the dam of Lord Netherland De Kol, who is sire of 48 A. R. O. cow. She was bred to Hengerveld De Kol, and the buyer was George D. Henry & Son of Port Henry, N. Y.

BEST ON EARTH

Used Over 20 Years
Tatumville, Ky.,
April 10, 05.
Dr. B. J. Kendall Co.
Dear Sirs:—I have
been using your
Spavin Cure and other
remedies for over
20 years and think
they are the best on
the market.
Respectfully yours
S. J. Cox.

Kendall's Spavin Cure
is the remedy for Spavins, Splints, Ringbones and
Curbs that endures two generations at its worth.
Price \$1; 6 for \$5. Greatest known liniment for
family use. All druggists sell it. Accept no substitute.
The great book "A Treatise on the Horse," free.
DR. B. J. KENDALL CO., Enosburg Falls, Vt.

BLOODED STOCK

CAN YOU ANSWER THESE QUESTIONS?

Where did alfalfa come from? What soil is best suited to alfalfa? What are the advantages of growing it? How is it best harvested, cured and fed? What kind of grain should be fed with alfalfa? How does it enrich the soil? How should alfalfa be sown? What is the best method of selecting seed corn? How should it be stored? How can you improve the stand and increase the production of corn per acre? What is the best method of testing seed corn? What is a germination box? How is corn best prepared for the planter? What is necessary to get rid of the barren stalks? What are the best methods of cultivating corn? How can the wheat yield per acre be increased? What constitutes a good seed bed? Should clover be plowed under for wheat? Is corn stubble a good place for sowing wheat? How should wheat be sown in order to produce the best results? How should wheat be fertilized? Why does your soil run down? What are the leading elements of fertility? How can you secure them and keep them in the soil? How much fertility does each crop take from the soil? What is the actual value of farm manure? How should it be applied to produce best results? Will grain crops make good hay? What is the best method of seedling for hay? Is the modern gasoline engine a good power for the farm? What is the best size gasoline engine to buy? What is a four cycle engine? What does it cost to operate a gasoline engine? Is ensilage the best and cheapest feed for dairy cows? What is summer soiling? What are the correct proportions of lean and fat producing materials in a dairy ration? How much milk and how much butter should a good cow produce? What kind of separator should the cow owner buy? What is skim milk worth as food for stock? How much wheat should an acre produce? Is wheat good in the farm crop rotation? Does any crop leave a poison in the soil? Can the wheat yield be increased by seed selection and breeding?

Every one of these questions and a thousand others of interest and value to every farmer are answered in "Farm Science." It is a splendid volume of 128 pages, profusely and beautifully illustrated and containing eight chapters specially prepared by the highest authorities on the several subjects. "Alfalfa culture in America," by Jos. E. Wing, Expert Agriculturist of Mechanicsburg, O. "Modern Corn Culture," by Prof. P. G. Holden, Iowa Agricultural College, Ames, Iowa. "Best Methods in Seedling," by Waldo F. Brown, Farm Specialist of Oxford, O. "Increased Fertility," by Prof. Cyril G. Hopkins, Illinois College of Agriculture, Urbana, Ill. "Profitable Hay Making," by Prof. Thomas Shaw, late of Minnesota Experiment Station, St. Anthony Park, Minn. "Power on the Farm," by Prof. Fred R. Crane, Illinois College of Agriculture, Urbana, Ill. "Up-to-Date Dairying," by Prof. Clinton D. Smith, Director of Michigan Experiment Station, Agricultural College, Mich., and "Small Grain Growing," by Willett Hayes, Assistant Secretary of Agriculture, United States, Washington, D. C. Every author is

a master in his line and every subject is treated exhaustively in all its ramifications. The whole composes the most valuable and authoritative work ever issued along such lines. A book of such value cannot be secured at any price. However, any reader of this paper will receive a copy by enclosing 3 two-cent stamps and addressing "Farm Science," International Harvester Company of America, Chicago, Ill.

WONDERFUL RESULTS.

Piqua, Ohio, Jan. 31, 1906.
Dr. J. B. Kendall Co., Enosburg Falls, Vermont.

Dear Sirs—Enclosed please find stamp for a "Treatise on the Horse and his diseases." I have and always will be a great user of the Kendall Spavin Cure. Have had some wonderful results. Yours truly,

Leo H. Wammes.

It is the Best Liniment.

Grassflat, Pa., Jan. 27, 1905.
The Lawrence-Williams Co., Cleveland, Ohio:

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A Safe, Speedy, and Positive Cure
The safest, best liniment ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blisters from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
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VETERINARY DEPARTMENT.

C. D. SMEAD, V. S., Editor

Professional advice given free to all subscribers through this department of Blooded Stock. Always describe symptoms, age, etc., as accurately as possible. Whenever you want prompt personal advice by letter and not for publication enclose One Dollar (\$1.00) fee. To derive the greatest benefits from this department preserve regular files. Always send your full name, post office, county and state with each inquiry direct to Blooded Stock, Oxford, Pa.

BUTTER FAT AND CHEESE.

R. M. Gow, writer on Jersey cattle, in a recent letter says:

"The idea that the fat contents of rich milk is largely lost in cheese-making, although current, is fallacious. One hundred pounds of milk testing 3 per cent fat should produce 8.05 pounds of cheese, whereas 10 pounds of milk testing 6 per cent fat should produce 12.69 pounds of cheese, assuming the lactometer reading to be the same for both. So the richer the milk the greater the quantity of cheese, in proportion, and the better the quality; and Jersey milk, being admittedly superior for the production of butter, is also superior for the manufacture of cheese, if the latter should be more of an object with any particular dairyman."

RED MILK AND BUTTER.

The Department of Commerce and Labor has received a report from Deputy Consul-General S. W. Hanauer from Frankfurt, Germany, stating that the dairymen have been much puzzled over the formation of the so-called red butter and also of red milk. Butter covered in spots with such carmine or scarlet-colored formations, he stated, is unwholesome for human consumption. It is therefore useful and interesting to learn the cause, and thereby possibly find a remedy, of this remarkable phenomenon. A German scientist, Dr. H. Stadlinger, chemical expert and inspector at the Royal Bavarian Food Inspecting Laboratory at the University of Erlangen, after lengthy researches has discovered that the red butter excrement is caused by very active bacteria, which produce the red pigment. The discoverer has named this enemy of dairy production "Bacterium butyri rubri."

Dr. Stadlinger's investigation developed the fact that the infection of this red "butter bacteria" is chiefly caused by the prolific bacteria vege-

BLOODED STOCK

tation which exists in the wells of the German dairy farms, the germs coming in contact with the dairy implements. In the doctor's opinion the best method to fight this enemy of dairy production is painstaking cleanliness in all dairying processes and by pasteurizing of the cream used for making butter. We have heard of nothing like this among dairymen of this country.

EARLY HISTORY OF THE REDS

The red hog first engaged my attention in 1879, while living in Indiana, when we used to hear about them being a breed that would attain great weight in New Jersey and New York, while a few had pushed their way as far west as Indiana and Ohio. In the fall of 1880 I moved to Iowa, into that part then newly settled. My father, the late William Roberts, and myself, had the Red hog fever pretty bad, and purchased our first foundation stock in the fall of 1883, securing a pair from T. R. Railsback, of Illinois, and I want to say that the sow, Robert's Queen, was a fine sow of the type, and would do any man's herd justice today. In 1882 and 1883 the first steps were taken to form a record, though of a local character, at Elkhorn, Wis. The first president was George A. Lytle, of Elkhorn, Wis., and the first secretary was W. H. Morris, of Elkhorn, Wis. At the close of their June meeting, 1883, there were nine members on the roll, and it included William M. Holmes, of Iowa, who did very much for the breed several years prior to this time in looking up its history and traveling into many States and investigating the different claims made by the breeders of Duroc-Jerseys.

Prior to this time hardly any two breeders had the same ideal, as they had no general standard of characteristics adopted. One of the first authorities in the early days on the red hog was C. D. Curtis, of Charlton, N. Y. He stated in a report in November, 1872, at the National Swine Breeders' Convention, held at Indianapolis, that no written history was back of this convention of breeders of the Duroc-Jersey breed of swine. Prior to this time there were two distinct families of the red hogs, one known as the Durocs, of New York, and the other as the Jersey Reds, of New Jersey. While the positive knowledge of the origin of these two families of red hogs cannot be given, they were known to exist fifty years back of 1872 in New Jersey, and were considered a valuable breed. They were of immense size, attaining as much as eight hundred pounds, dressed, at eighteen months old, some reaching two thousand pounds at two years, and on up to twelve and thirteen hundred pounds, dressed weight. The Durocs were considered of finer grain than the Jersey Reds, with smaller bone and carcass, though otherwise they were similar. It was the belief of some of those who had looked into the matter, that the Durocs were origi-

nally called the Red Berkshires, and that they came from England. It is considered that William M. Holmes, about the year 1880, did as much, or more, than any one to bring these hogs into prominence in the West, improving and developing them, sending both time and money visiting different places where the red hogs were raised.

At the time we first purchased our stock the hogs exhibited at the fairs were subject to considerable fun and jeers at the hands of the Poland-China and Berkshire breeders, and were few in comparison with the other breeds exhibited. At that time they were coarser than they are now. They are now of better symmetry and finer finish, and certainly can compare with any breed at any show without disparagement to them, either in numbers or quality. It shows that the breeders who took hold of them first had faith in their ability to improve, and bring forth the kind that would meet the popular demand of the farmers and breeders fully.

The first record issued by the American Duroc Record Association, of which Charles H. Holmes was Secretary, in 1885, states that William M. Holmes did more than any other breeder of red hogs in America to improve and perfect them, and wrote a standard of characteristics for them in 1877.

I do not believe that there is any other breed that has made such strides in the last ten years toward winning friends among the breeders and farmers as has the Duroc-Jersey. I take pride in breeding them, and I hope to have some of the good ones the coming season to supply both breeders and farmers. The Poland-Chinas are finding them very strong rivals today, and the breeders of Durocs wear a smile when they remember the sneers that they were wont to receive in years past. I am for the red hog as my special favorite first, last and all the time.—L. H. Roberts in Jersey Hustler.

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BLOODED STOCK

THE IMPORTANCE OF TESTING COWS.

The question is often asked—Does it pay to take time to weigh and test milk? If an increased production of milk is not obtained by keeping a record of the herd, certainly it does not pay to bother with the scale and tester. But what do the facts say? We find in studying data upon this subject that the average yearly production has been materially increased by knowing exactly what each cow is doing.

In a certain herd, where the milk was weighed and tested for three years, the average production was raised from 194 pounds of butter-fat per year to 289 pounds, or an increase of 95 pounds of fat per cow per year. For the past few years, butter-fat has been worth, on an average, about 22 cents a pound, which would make the 95 pounds of butter-fat worth \$20.90. It cost in the neighborhood of \$5 more per year to board each cow in the third year than it did in the first; by subtracting this from the \$20.90, we have \$15.90 profit. There were 17 cows in the herd, so the total net profit was \$277.30 greater in the third year than in the first.

By knowing what each cow was doing, it was found that a little more grain was needed than was given in the first year, to produce a larger and more economical flow of milk; the test showed that some of the cows were unprofitable, and were sold, and a few better cows were put in their places.

It did not take \$25 worth of time a year to test this herd, and the return for the time spent was \$277.30, which was exceptionally large profit on so small an investment.

Another herd, on which the scale and the test were used, averaged 141 pounds of fat the first year and the second 201. This was a gain of 60 pounds of fat per cow. There are not many cases where such a large increase could be made, without selling and purchasing some animals, but in this instance only a few cows were sold, none purchased, but by a better system of feeding and by disposing of a few cows, this wonderful increase in fat was made. The owner was delighted and surprised to know that a better system of feeding and closer attention to his herd would make such a great difference. He expressed himself thus: "The result of testing has been a great revelation to me."

It is interesting to note the extra care that some persons will give their cows when they begin to keep a record of their herds. At the close of a second year's test, the owner of a herd, of which records had been kept for two years, was asked why his cows made such a large increase, for but few cows were sold and but few added to the herd, yet there was a large increase. The reply was: "I take better care of my herd since I have begun to test; I do not permit them to remain out on cold and stormy days, and I see that they are milked and fed regularly." Ah, therein lies the secret of successful dairying—close attention to the wants and requirements of the herd.

The first year that this herd was tested, the average production was 157 pounds of fat, in the second year, the average production was 207

pounds—a gain of 50 pounds of fat per cow per year, made almost entirely by giving the herd better care. While there are as great differences in cows, there are just as great differences in men, and the man who adopts the system of keeping a record of each cow in his herd, not only finds the poor and unprofitable cows, but he finds also what kind of a dairyman he is. In other words, testing gives him an opportunity to eliminate the poor cows, select the calves from the best, and to find his shortcomings as a dairyman.—Hoard's Dairyman.

CHESTER WHITE SALE.

The top sale of Chester Whites in 1905 was held by W. T. Farquhar & Son, Modoc, Indiana. They sold sixty-three head for an average of \$28.83; eighteen of them were boars, and not a boar was started for less than \$15.00, and some of them went to the three figure mark. That was their third successful sale, which proves that their pigs give satisfaction among breeders and farmers. For their fourth sale, to be held October 11th, they will have 140 head of spring and 20 fall pigs to select from. They are bred the same as last year, with some new blood added. Their pigs are doing well, and they show every indication of being a bunch that will again make a good lively sale. Their pigs are sired as follows: Fifty head by William Tell. He was a winner at the World's Fair, and his pigs topped their 1905 sale. They have 44 pigs sired by Modoc Boy. Just take a look at his pigs. He sires a pig that both the breeder and farmer want, and he has many of the good useful kind scattered over the State as any other white boar. They also have pigs sired by Winner by Tenderfoot. He traces to all the prize winning blood that Hardin Bros. have been so successful with. They also have pigs by I-am-it by Great I Am. His litters will be an out-cross on anything they have sold. They also have pigs by Medium O. K., by Happy Medium Jr. As to brood sows, they have in their herd all the good producers they had last year with several good ones of new blood lines added.

Oregon.

Never was there a better time to invest in a sheep ranch than now, for the reason that it will take but a few crops of lambs and wool to pay for an outfit if times hold good, which, judging from the present outlook, they will for a good many years to come. Several good ranches can be had now on very favorable terms.

The American Cotswold Record Association offers \$25 to be disbursed at the Oregon State Fair. While this is all right in a way, the doubling or even trebling of that amount would not be an injudicious move, where Cotswolds are held in such high esteem and are giving such good account of themselves as they are in

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent or exchange, poultry, poultry supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants, and vegetables. The cost of advertising is

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SUNNY SLOPE HERD of Red Polled Cattle—the beef and dairy breed. Choice young stock for sale. L. H. WALKER, Reed City, Michigan.

SHORT HORN CATTLE Either sex, fed, bred right herd of fifty. JNO. NORTHCUTT, Cynthia, Kentucky.

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FOR SALE—Eleven pure bred Holsteins Cows, from 2 to 7 years of age. Some of them have a record of 80 lbs. milk in one day, and 31 4-5 lbs. of butter in seven days. This stock will be sold at a bargain as I am going out of the business. S. F. WILLIAMS, Canton, Pa.

HOGS.

POLAND CHINA PIGS Both sexes, that are beatties and bred for quality from Early Sunshine, whose sire sold for \$5000. Also service boars. We guarantee satisfaction. Write us before you buy. G. F. McCLALLAN & SONS, Groveland, Illinois.

LARGE English Yorkshires, sired by "White Side Comet". CHAS. S. SNOOKS, Utica Mills Maryland.

REGISTERED Duroc Shoats, weighing 90 lbs.—\$8.00. Pigs 12 weeks \$5. WILLIAM HARSHMAN, Utica Mills, Md.

GET SOME Improved Large Yorkshire Pigs. Hundreds are glad they have these pure breeds. Price low. Money back if not satisfied. Write now. HARRY B. BILLINGTON, Wells, Minn.

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100 TURKEYS. Selected stock. Mammoth Bronze, White Holland, Buff and Narragansett. Eggs \$2 per 11, 15 varieties, poultry eggs \$1.00 per 15. S. DURIGG & SON, Armstrongs Mills, Ohio.

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EXPOSITION BOULEVARD.

Magnificent Driveway to be Constructed from Norfolk to Jamestown Exposition Grounds.

Norfolk, Va.—One of the objects of international expositions abroad has been to leave a permanent memorial of the celebration. This is especially true of the French World's Fairs. The Trocadero Palace, the Hall of Industry and the Alexander Bridge will stand for centuries as memorials of the several expositions which created them.

A far less spectacular, and yet perhaps more valuable, reminder will be left after the Jamestown Exposition has passed into history. The South hasn't been noted for good roadways; on the contrary, it has gained an unenviable fame by its maintenance of bad roads. In connection with the Ter-Centennial the city and county of Norfolk will combine forces and will construct a model boulevard linking Norfolk with the Exposition.

To the limits of the city the avenue will be asphalted. The six mile stretch from the city limits to the Exposition grounds will be an example of the most approved methods of macadam road building.

The boulevard will be one hundred and twenty-five feet wide. There will be room for a double track electric car line in the centre, and broad spaces on either side. It will traverse a very picturesque route, alongside and over streams and through numberless small groves. The rights of way have been secured for the entire stretch, and the route selected is the one preferred by the Engineer of the Good Roads Bureau of the Department of Agriculture, at Washington.

Automobiles may travel from Norfolk to the Exposition grounds in twenty minutes with ease, and observe the restrictions regarding speed. The electric cars will take no longer, and on such a perfect roadway vehicles drawn by horses will make excellent time.

One of the reasons for the Government's interest in this matter relates to the transportation of troops. Such bodies of soldiery as will land at Norfolk will have either to march or ride to the Exposition encampment. A road of such character as the Exposition Boulevard will enable them to march easily, and thus a picturesque feature will be added to the celebration, for troops will come at frequent intervals during the entire Exposition period. The President of the United States was authorized by Act of Congress to invite every State to send its militia to the Exposition. He has already issued a proclamation to this effect, and it is reasonably certain that most of the States will accept. These regiments of citizen soldiery will not come all at one time but so arrange that one or more States will always be represented in the United States encampment.

We predict a heavy and early demand for rams this season. As is generally known, a good many of our western friends could not get half the yearlings and older rams they wanted, and consequently had to be satisfied with lambs or nothing.

BLOODED STOCK

DEPRAVED APPETITE AND VICIOUSNESS IN HOGS.

The owner of a fine Duroc-Jersey sow writes us that she had a large litter of pigs a few days ago and immediately devoured every one of them." He wants to know what causes this unnatural appetite, and whether it would be good policy to retain such a sow in his breeding herd. Another man says his sows are vicious at farrowing time, so that he is afraid to handle them, and he, too, is at a loss to know the reason for such vice. The two complaints belong in the same category. Some men make it a practice to feed salt pork to pregnant sows and claim that this plan prevents the pig-eating habit. Others contend that it is less apt to show up if sows are fed this and that man's dope of stock food. Some, on the other hand, claim that it is a habit peculiar to certain families of hogs, and for that reason cannot be prevented by treatment, and needs only the discarding of hogs from the family in question. There may be some truth in the latter claim but the other men are at fault we believe, in their explanation of the pig-eating habit.

In our opinion, and it is based on long experience, the depraved appetite is but a sign of a certain set of circumstances and conditions which are unnatural to the hog and indicative of trouble of various kinds. It is a result of pampering, domesticity, overfeeding, and lack of exercise. It is most commonly seen where corn has long been the well nigh exclusive diet of the hogs in a breeding herd, and where, as a result, the animals have become fat, flabby, sluggish, costive, feeble in constitution, and defective in bony frame. It is therefore associated with rickets and similar diseases of the system, indicated by tendency to paralysis, breaking down of pasterns, thin coats, small litters, weak pigs and similar indications of debility and degeneracy.

The pig eating is an indication of the fact that the sow possibly lacks some needed ingredient in her daily rations and seeks to appease her appetite by the eating of flesh. It may be that she lacks nitrogenous matters, and this of course is so if corn has been her chief nutrient, but it is also possible that corn over heats the system and tends to an irritation of temper which explains the destruction of the pigs, which are then devoured as an incidental happening. We believe that the sow kills her pigs from meanness, from nervousness, from irritability,—call it what you will—but more for some such reason as this than desire for the flesh food afforded by the carcasses of the pigs. The same train of circumstances leads up to viciousness of pregnant sows during farrowing time, and we can take it for granted that our correspondent who complains of the bad temper of his sows has kept them warmly housed most of the winter and been extra good to them by feeding them all the corn they would eat, or a generous ration of other rich and unnecessary food.

We know that such sows are at farrowing time in a fretful condition because of constipation and lack of muscularity and vigor for the im-

pending trial. They are loath to leave their beds, even to eat more corn, and when forced out of their nests appear weak on their legs but ready to snap at their attendant. Such sows have few pigs, and they are apt to come dead or so weak that they speedily succumb. The sow that farrowed out doors in the corner of the rail fence or at the bottom of the straw pile, may have the viciousness of the wild animal seeking to protect her young, but not the vice of bad temper induced by pampering and sickness. She had no difficulty in bringing forth her young. No forceps had to assist nature, and such a sow did not eat her pigs. Possibly they were so spry from birth that she could not catch them; anyway they kept out of her way or had nothing to fear from a depraved appetite. To prevent pig eating and viciousness, let us simply manage sows in a more natural manner by feeding lightly of less fattening and constipating foods, seeing to it that ample exercise is taken every day in the open air or, when that is impossible on account of inclement weather, indoor rooting of oats in litter spread on a barn floor.—A. S. Alexander, in Farmers Review.

If you dip your show sheep—which of course you do—you should dip them early, so that the fleece may regain its normal lustre before show time comes along.

An expensive ram is not always a profitable one, but this does not mean that we should invest in what unmistakably appears to be an inferior one.

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Successful Farming, Des Moines, Ia. This great agricultural paper has won a name in the corn development now going on in the West. How to select seed, how to plant, how to cultivate so as to increase the bushels per acre is important to every farmer. This paper and **Blooded Stock** both one year for 40c.

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Farmers' Voice, Chicago, Ill., is one of the finest illustrated farm monthlies published. It is a regular family paper, concerning not only the farm topics but also the household, making it one of the most valuable papers printed. Every issue is worth the subscription price. This paper one year, along with **Blooded Stock**, for 65c.

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VOL. XII.

OXFORD, PA., AUGUST 1906.

No. 6

Location, Construction and Operation of Hog Houses

By William Dietrich, Assistant in Swine Husbandry, University of Illinois

Instructions.—In order to grow swine most successfully in a country with a cold or varied climate, it is necessary to have some kind of a hog house. The question that first presents itself is what kind shall it be? In studying the swine industry from the market standpoint and from the breeder's standpoint, it appears that the greatest success in the swine business, it is desirable to produce two litters a year from mature sows and to have these farrowed so that they can be put on the market at the most favorable time.

Location.—The proper location of a hog house or shelter of any kind for swine is one of the first essentials to success in swine husbandry.

In providing shelter for swine, as well as for other classes of live stock, surroundings should be furnished that conform as near as possible to nature as the improved condition of the animal and circumstances of the owner will permit. Swine in the wild state inhabit the forest, where shade, water, protection from cold winds and natural soil are abundant, and where they may select dry or damp localities as they please. The best surroundings, then, for swine, are those that will satisfy their natural desires, but so modified and improved as to promote the largest financial results.

The best location for a hog house, therefore, is one that is well drained and well lighted, and one that will permit access to pasture, to good shade and to a stream of running water that is free from disease germs, where also are opportunities for making wallows in clean mud.

If the building can be placed on a sandy or gravelly soil it will afford better drainage than a clay, silt, or peaty soil would furnish. Light and shade are desirable for reasons that are apparent to everyone. Pasture should be accessible as considerable food is obtained from the soil in the form of roots, worms and insects, as

well as many materials that are not foods, but are necessary to the health of the pigs. A limestone soil and stone themselves, furnish the lime that is so essential in building up bone. A rolling pasture is preferable because it furnishes better drainage and a form of exercise that is conducive to the production of a large percentage of lean meat. It also tends to produce strong legs with upright pasterns, which, from the breeder's standpoint, are among the first essentials of a good hog.

A stream of pure running water is desirable, for then drinking water in the best form will be available at all times and will be more wholesome than it would be were it supplied in a trough where it is bound to become stagnant, more or less warm, and foul. If there is no natural stream at hand water pumped from a well by a windmill or other motive power will supply the need. A clean mud wallow is enjoyed more by the swine in the summer time than any one other condition that may be furnished them. It keeps them cool, destroys lice and keeps the skin in a good healthy condition.

Types of Hog Houses.—The two general classes of hog houses most in use are individual houses and large houses with individual pens. A hog house that is best for one man under his conditions and manner of handling swine, may not be best for another where the conditions and manner of handling differ. The difference is due to the originality of different breeders who have solved the problem in regard to hog houses to suit their individual tastes and conveniences.

Individual Houses.—Individual hog houses, or cots, as they are sometimes called, are built in many different ways. Some are built with four upright wall and a shed roof, each of which (the walls and roof) being a separate piece, can easily be taken down and replaced, making the

moving of these small houses or cots an easy matter. Others are built with two sides sloping in toward the top in the form of an A tent. They are built on skids and when necessary can be moved as a whole, being drawn by a horse. They are built in several different styles; some have a window in the front end above the door while all may have a small door in the rear end near the apex for ventilating purposes. They are also built in different sizes. Indeed, there are about as many forms of cots as there are individuals using them. The form in which these houses or cots are built is of little significance as long as the general principles pertaining to the health of the animals and the convenience of the breeder are observed.

The arguments in favor of this type of houses for swine are that each sow at farrowing time may be kept alone and away from all disturbance; that each litter of pigs may be kept and fed by itself, consequently there will not be two large numbers of pigs in a common lot; that these houses may be placed at the farther end of the feed lot, thus compelling the sow and pigs to take exercise, especially in the winter, when they come to the feed trough at the front end of the lot; that the danger of spreading disease among the herd is at a minimum; and in case the place occupied by the cot becomes unsanitary, it may be moved to a clean location.

Although individual houses have certain characteristics or advantages in their favor, large houses, if properly built, also have some points of advantage and these are good sanitation, serviceability, safety in farrowing, ease in handling hogs, and large pastures, involving little expense for fences.

Sanitation.—In order to be sanitary a hog house should admit the direct rays of the sun to the floor of

(Continued to page 4)

BLOODED STOCK

FOR PRACTICAL STOCK BREEDERS AND FEEDERS

PUBLISHED MONTHLY AT OXFORD, PENNA.

UNDER EDITORIAL MANAGEMENT OF C. E. MORRISON.

Questions—Subscribers of the paper are at liberty to ask questions on any subject concerning which they desire information, and these questions will be answered as promptly and carefully as possible, either through the paper or by mail. When asking for information always enclose a 2-cent stamp for postage in case an answer by mail is necessary.

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THINGS THAT DETERMINE THE QUALITY OF CREAM.

The causes that produce undesirable flavors and odors in cream are as follows:

1 Cream produced from abnormal milk which has been drawn from diseased cows.

2 By feeding the cow mouldy or partially decayed feeds.

3 By keeping the animal in uncomfortable conditions, which cause her to become feverish or excited.

4 By milking a cow in a filthy stable, or near decomposing material.

5 By allowing cows to wade around in mud puddles or cesspools and then milking the cow without washing her udder.

6 By milking the cow with dirty hands, or by milking on the hand in order to wet the teat. Under all conditions, milk the cow with a dry teat. If the teat is chafed or sore use vaseline instead of milk to moisten it.

7 By milking into filthy pails or pails that have not been scalded with hot water. In washing the milking utensils it is advisable to use hot water and some washing powder, and finally rinse with boiling water, or steam over a steam jet.

8 By running the milk through an unclean separator. (See bulletin No. 131, Kansas Experiment Station.) The separator should be taken apart and washed every day. If the separator is used twice a day it is preferable to take it apart and wash it both times, but if time does not permit this, at least five gallons of warm water with some washing powder should be run through it, followed by a gallon of boiling water without the washing powder.

9 By running cream into a filthy can. Care should be taken that cream should be put into a clean milk can that has been previously been scalded and cooled.

10 By not cooling the cream to a proper temperature. After cream has been separated it should be cooled to at least 60 degrees F., and lower if possible. By putting cream from two milkings together care should be taken that the cream added last is thoroughly cooled.

11 By not properly covering the cream can with some cloth in the summer when driving long distances to the station.

12 By letting cream stand at stations for a long period of time.

Delivery.—Cream should be fresh and should be delivered at least twice a week in winter and three times a week in summer. Cream kept for longer periods of time, unless kept on ice, will produce a rancid flavor when churned into butter. Hence, a man delivering cream must deliver as often as this or his cream will not be first grade.

Per Cent of Fat.—First grade cream should contain not less than 30 per cent of fat, for the reason that cream with this per cent of butter fat will keep better and cost less to transport than cream of a lower per cent of fat, and the dairyman will recover more skim milk.

Some causes that tend to lower the butter fat to below 30 per cent in cream separated with a cream separator:

The variation in the per cent of butter fat of hand separated cream is very great if operators are not careful in operating their machines uniformly. There are several factors that influence the test of cream from separators. The first and probably the most important cause that

BLOODED STOCK

reduces the per cent of butter fat in cream is turning too slowly, not giving the bowl enough speed. Anything that tends to change the speed of the bowl from one separation to another influences the per cent of butter fat in the cream. A uniform speed of the bowl is obtained by turning the crank at a given speed at all times and giving the crank an even pressure at all points in its circuit around the axis. The speed at which the machines should be run is indicated by the manufacturer. Follow these instructions and count the revolutions each time the machine is used, to be sure that the speed is maintained.

If milk is warm the cream will contain a slightly higher per cent of butter fat; if cold, it will contain slightly lower per cent, other conditions being equal. Milk immediately after it is drawn from the cow has the proper temperature at which to separate.

Milk should be run through a separator at a constant rate. If milk is fed into the separator at an uneven rate, if at any time the flow of milk be stopped, the thickness of the cream will be greatly influenced. The faster milk is run through a separator, the thinner will be the cream, other conditions being equal.

The amount of water or skim milk used to flush out the bowl will naturally tend to decrease the per cent of butter fat by diluting the cream with water or milk.

There is a cream screw or skim milk screw in each separator for the purpose of changing the thickness of cream when desired. By this it can be so regulated as to skim thin or thick cream, and when once set, if all other conditions of the separator are uniform, it will produce nearly a constant per cent of butter fat.

These principles hold true in all cream separators, and explain why the per cent of butter fat sometimes runs below 30 per cent.

While all the points mentioned herewith can be known without depending upon the judgment of any particular individual, as for instance, determining the amount of acid in the cream, the frequency of hauling the cream, per cent of butter fat in the cream, etc., there however remains one point still unsolved which is directly dependent on expert judgment, namely, the flavor of the cream.

A cream may be acid and have a pleasant flavor and odor, and, on the contrary, a cream may be sweet and have a bad flavor. As yet no test has been found that will determine the flavor absolutely except the taste and smell of man. Hence while it is a simple and practical problem for all creameries to adopt the schemes as suggested above, in due justice to the producer as well as the creameryman, there should be, in as many places as the business would permit, men who are competent and efficient in judging flavor and odor of cream. Such a man, in order to give universal satisfaction, must have some experience in the judging of cream. He must furthermore have some knowledge of the physical and chemical properties of milk and cream. In short, he should be a man well versed in dairy lines in order to impart information to those who need it, and at the same time stimulate and keep up the progress in dairying.

While this method would be only practicable in localities where dairying is carried on quite extensively, there is, however, a second manner of handling cream, namely, to have each farmer send his cream directly to the creamery. This is a very satisfactory method to the creamerymen and also to the producer if the producer is located on a direct shipping point to the creamery, but wherever transfers need to be made, the grading of this cream at the factory, would be unjust to the producer since the railroad company is quite often responsible for delaying shipments at the transferring station. To overcome this point it is quite necessary, in order to raise the standard of butter, to operate refrigerator cars for the purpose of transporting cream long distances, and it is hoped that in the near future dairying will develop to such an extent as to make it profitable to use refrigerator cars for transporting this product.—Kansas Experiment Station Bulletin 135.

"No man can breed beef cattle, mutton sheep or swine in the wisest way," says Prof. C. S. Plumb, of the Ohio Experiment Station, "who does not attend the shows and study and compare breeds and types. No man can feed and sell to the fullest degree of success who is unfamiliar with the butcher beast, a model of fitness in the show ring, or who is a stranger amid the pens of the yards, where quality and character make values."

BLOODED STOCK

SCIENCE OF PIG FEEDING.

The science of pig feeding involves the following three principal factors, namely: Feed for maintenance, feed for waste and feed for gain. The first is constant, the second variable, and the amount of feed available, for the latter is dependent upon the first two and upon the total quantity of feed eaten by the pigs. Pig feeding, for the most profitable results, then becomes a very complex proposition, and in order to make it more comprehensible, it might be well to draw a comparison between this and a farm operation with which we are all familiar.

Suppose a field of wheat in the shock that is to be threshed with a steam thresher, and sheaves of wheat are to be used with which to fire the engine. After the engine has been fired, and everything is in readiness to begin threshing, it may be compared to the process of pig feeding. The wheat that is used in the engine for fuel represents the feed used by the pig for maintenance and to furnish the energy for digesting and assimilating the feed, also to excrete the waste products. The grain that goes into the sack represents the gain made; the grain that blows over, the waste; and the straw, the excess. When the separator is run empty, the wheat used as fuel in the engine represents the actual quantity of feed used for maintenance after eliminating the factor of waste. As grain is fed into the machine, more fuel is required in the engine; some to handle the material that is being fed into the separator, besides that to run the machine itself. When grain is fed into the separator, only in small quantities, the effectiveness of the machine is the greatest; that is, under these conditions, more of the grain is saved.

As the machine is being crowded toward the upper limit of its capacity, more grain is left in the straw and more passes across the sieve, because a larger part of the sieve becomes clogged, allowing a smaller quantity of grain to pass through into the sack or wagon. More grain is also required to furnish the necessary fuel in the engine. Now as the upper limit is reached, so that the engine is pulling full load, and the sieves have become largely clogged, a considerable portion of the grain goes into the straw stack, and the amount of grain fed into the separator is again reduced, the machine gradually becomes more effective; that is, as a smaller amount of grain is fed, less fuel is required in the engine, more grain is threshed out of the straw, and more of the material that has clogged the sieve is gradually rattled out, allowing more of the grain to pass into the sack. But it takes considerable time for all the material that has become lodged in the meshes of the sieve to rattle out so as to allow the machine to become as effective as it was in the beginning.

From this, it is seen that the grain thresher is more effective when not crowded, to its fullest capacity. It is also more effective when the moderate quantity thus handled is approached from below, than when it is approached from above. These same processes can be traced in pig feeding. Beyond a certain point, depending on the relation of the maintenance ration to full ration, the animal body is more economical with the feed eaten when it is fed a smaller quantity than when it is fed a larger amount of feed, because the factor of waste, due to excessive feeding, and the tendency toward nitrogen equilibrium in the animal body becomes larger as that amount of feed is increased. Add to this, the greater quantity of feed required for digestion, assimilation, and excretion, and it is readily seen how the ration becomes less effective with the increase in the amount of feed eaten. On account of this tendency toward nitrogen equilibrium, the ration fed to the animal is more effective when the proper quantity of feed has been approached from below, than when it has been approached from above, similar to the grain thresher.—Prof. Wm. Dietrich, in Connecticut Farmer.

DEHORNING CALVES.

The English Board of Agriculture gives the following direction for use of caustic potash in dehorning calves:

Clip the hair from the top of the horn when the calf is from two to five days old, slightly moisten the end of the stick of caustic potash with water, or moisten the top of the horn bud, and rub the tip of each horn firmly with the potash for about a quarter of a minute, or until a slight impression has been made on the center of the horn. The horns should be treated in this way from two to four times at intervals of five minutes. If during the interval of five minutes after one or more applications a little blood appears in the center of the horn, it will then only be necessary to give another very slight rubbing with the potash.

The following directions should be very carefully observed: The operation is best performed when the calf is under five days old, and should not be attempted after the ninth day. Caustic potash can be obtained from any druggist in the form of a white stick; when not in use it should be kept in a stoppered glass bottle in a dry place, as it rapidly deteriorates when exposed to the air. One man should hold the calf while an assistant uses the caustic potash. Roll a piece of tinfoil or brown paper around the end of the stick of potash which is held by the fingers, so as not to injure the hand of the operator. Do not moisten the stick too much, or the caustic may spread to the skin around the horn, and destroy the flesh. For the same reason, keep the calf from getting wet for some days after the operation. Be careful to rub on the centre of the horn and not around the side of it. Caustic potash is poisonous, and therefore should be kept in a safe place, with a label marked "Poison" in plain letters on the bottle.

HOW SWINE MULTIPLY.

Not long since two gentlemen were driving by the home of a successful farmer. As they passed the barn lots a thrifty little sow pig crossed the road before them. They remarked about the beauty of the little animal, says Wallace E. Sherlock, in Farm, Field and Fireside, and the older of the two said: "You may not believe me, but I can take that little sow and in four years with her increase buy the best eighty acres there is in this neighborhood and have enough hogs left to stock up the farm and pay a good share of the expense in their keeping."

At first thought the statement does not seem possible, but a little figuring will prove that it is not far from the truth. We will suppose that the sow and her female increase will farrow for the first time when they are a year old, and give birth to a litter every six months thereafter, and that each litter will average six pigs, three males and three females.

At the end of the first year we have the sow and six pigs—three males and four females. In eighteen months the sow has a second litter. This brings the total up to seven sows and six males. After two years this sow has her third litter, and each of the three sows of her first litter also farrow. This gives us a total of nineteen sows and eighteen males. In two years and a half the three sows of her second litter are old enough to farrow. This brings our number up to forty females and thirty-nine males. In three years the sows of the first, second and third litters will farrow, and in addition the nine that were born to the three of the first litter. This increases the number to ninety-seven females and ninety-six males. Thus it goes on in progression till the end of four years, when we have a total of 508 females and 507 males, hogs enough to buy a good-sized farm.

A kerosene barrel that has been burned out and used for a water barrel for some time is often used for a meat barrel. The most important point is to have it clean and tight enough to prevent leakage. A large stone jar is the best vessel that can be had. One holding twenty-five or thirty gallons is expensive, however, and must be carefully handled to prevent breakage. The jar is more easily cleaned than a barrel, and is in every way preferable, if the first cost can be afforded. A barrel or jar that has once held meat may be used again and again, unless meat has spoiled in it. If used repeatedly, it will be necessary to scald it out thoroughly each time before packing with fresh meat.

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LOCATION, CONSTRUCTION, AND OPERATION OF HOG HOUSES.

By William Dietrich, Assistant in Swine Husbandry, University of Illinois.

(Continued from page 1)

all the pens and exclude cold drafts in winter, be dry, free from dust, well ventilated and exclude the hot sun during the summer.

A building with alley running lengthwise through the middle, between the rows of pens, should stand lengthwise east and west with the windows on the south side. The important factor to consider in this connection is the height of the windows in connection with the width and manner of construction of the building. The lower window is so placed that at noon of the shortest day of the year, the ray of light which passes through the upper part will fall upon the floor of the south side pen on the opposite side from the window. This allows the total amount of light coming through the window at this season of the year and this time of the day to fall upon the floor within the pen. In the morning and in the afternoon when the sun is not at its highest point, a part or all of this beam of light will pass beyond the pen. Consequently, during the latter winter months, there will be a maximum amount of sunlight on the floor of the pen.

The lower part of the upper window in the upper part of the building performs the same function for the pen on the north side of the alley as does the lower window for the pen on the south side.

By this arrangement of windows there is possible a maximum amount of sunlight on the floor of the pens in winter which will serve to warm the interior of the house and especially the beds during the latter months of winter, thus making it possible to have pigs farrowed very early in the season. Sunlight not only warms and dries the building, but destroys disease germs, thus making them both warm and sanitary. Sanitation is further augmented by the upper part of the upper window which, when open, acts as a ventilator. It is supplied with weights so that it can be opened and closed at will by

the attendant while standing on the floor of the alley.

To have this arrangement of windows in the latitude above cited, it is necessary to have the top of the lower window which throws light into the pen on the south side, 5 feet 6 inches from the floor. The upper window which throws light into the pen on the north side, is longer, but a point in this window the same distance above the lower end as the height of the lower window should be 9 feet 8 inches from the floor. This necessitates a flat roof for the part of the building south of the alley, which must necessarily be made of some material that will shed water at a slight pitch. The wall on the north side of the building is made as high as that on the south side, but the roof on the north side and alley is made steeper so as to have more air space and good ventilation. This part of the roof, then, may be made of shingles.

Dryness should be furnished by thorough drainage; freedom from dust by sprinkling with water and the rays of direct sunlight should be prevented from entering the pens during the hot part of the summer days, which in the above mentioned hog house is done by the manner of construction of the building; the lower window being shaded by the eaves and the rays passing through the upper window fall upon the floor of the alley.

Serviceability.—In order to be most serviceable, a hog house should be constructed so that it can be used every day in the year. If this can be done, it is permissible to spend more money in the construction than would be warranted were the building to be used only for a few months during the year. In order to be an economizer of labor, the house should be planned so that the largest amount of work may be performed with the smallest amount of labor, which, with the present scarcity of labor, is a very important factor.

Farrowing and Handling.—Farrowing pens should be supplied with the fenders, which prevent the sows crushing the pigs, and should be built so that the attendant may lend assistance if necessary, both with convenience and safety. By having all the hogs under one roof handling becomes simpler and in case of bad weather much more convenient.

An argument that has been advanced against the large hog house is that by having a large number of brood sows in such close proximity to each other, if one is disturbed or molested in any way all the others will become fretful, and when feeding is commenced at one end all the rest will become uneasy and injure their litters. This argument may hold where the partitions are solid board fences, but by the arrangement described hereafter, the sows can see each other and see what is going on about them, and not being strange to each other and the attendant, will not be disturbed to so great an extent. If the feeding is done regularly and in the same order each day, the sows or pigs soon become accustomed to the system and wait patiently for their turn. Furthermore, by this arrangement of wire partitions the little pigs are more easily tamed and will do better because they will not become frightened every time a person passes the pen.

Pastures.—By having a large hog house the hogs can be kept together and allowed to go in a drove from the hog house to the pasture or to any other available place on the farm and with very little training each sow with her litter will return to her own pen at night, thus necessitating few pastures.

Operation.—The hog house is planned to supply the needs of the man who grows hogs for the general market as well as for the man who produces high class breeding stock. It will permit of producing two litters a year from the same sows. This, it is very often said, cannot be done successfully. But the cow, the mare, and many other animals will support one young at the udder and at the same time, another within the uterus. The sow can produce two litters a year and never be supporting more than one at the same time. Then, why not have her do this and return more profit to her owner, and at the same time keep good mature sows in the herd rather than sell them to avoid keeping them all the year for a single litter, which necessitates breeding from young, immature and untried gilts?

The sows are bred to farrow in February. In order to insure exercise during the winter months, they are allowed to run on a pasture or

in a barnyard during the day and to come to the hog house at night where they sleep and are fed both morning and night. Each sow is trained to come to her own pen, which can be done with very little trouble. About a week before farrowing time, each sow is confined in her pen, having access, of course, to the small yard on the outside. She is kept here until the pigs are from one to two weeks old, and by this time they have learned to know their own dam so that all can go out together. The sows and their litters are then fed in their respective pens each morning and evening until weaning time. At this time the sows are taken away and bred for the second litter, which is to be farrowed in August. After weaning, the pigs are fed, each litter in its respective pen, in the hog house, they also having access to pasture during the day. This is the growing period for the pigs and in order to get the best results it is necessary to feed them under such conditions that their feed can be controlled. When it is time for the sows to farrow again they are returned to the hog house and the pigs taken out to a separate lot and finished for the market. At this time the pigs may be put on full feed and be fed in larger droves.

This process is repeated twice each year, but in winter when the weather is cold a few pens at one end of the hog house, or a separate shed on the outside, must be reserved for the brood sows and later for the fattening hogs.

A hog house built and operated according to the above outlined plan makes it possible to perform a maximum amount of work with a minimum amount of labor and to put the pigs on the market at seasons of the year that are out of the ordinary, and it can be expected that pigs thus marketed will sell for higher prices than those that are marketed along with the general supply.

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS.

From July 1st to July 31st, 1906.

Unless otherwise mentioned, these records are for a period of seven days. They are made under the careful supervision of State Agricultural Colleges and Experiment Stations, and their accuracy is vouched for by them; no private records are reported to the Holstein-Friesian Association.

During the period from July 1st to July 31st, 1906, records for 107 cows have been accepted; five of which were begun more than eight months after freshening. All made seven-day, and two made thirty-day records. The averages by ages were as follows:

Thirty-four full aged cows averaged: age, 6 years, 1 month, 3 days; days from calving, 35; milk, 457.7 lbs.; per cent fat, 3.26; fat 14,955 lbs. Eleven four-year-olds averaged: age, 4 years, 4 months, 4 days; days from calving, 35; milk, 390.9 lbs.; per cent fat, 3.25; fat 12,703 lbs. Sixteen three-year-olds averaged: age, 3 years, 4 months, 9 days; days from

BLOODED STOCK

calving, 26; milk, 376.3 lbs.; per cent fat, 3.25; fat, 12,218 lbs. Forty-one heifers classed as two-year-olds averaged: age, 2 years, 3 months, 1 day; days from calving, 36; milk, 306.8 lbs.; per cent fat, 3.14; fat, 9,627 lbs.

This herd of 102 animals, of which, as usual, more than one-half were heifers, produced in seven consecutive days 38,461.6 lbs. milk, containing 1,238,389 lbs. of butter-fat; showing an average of 3.22 per cent fat. The average yield for each animal was 377.1 lbs. of milk, containing 12,141 lbs. of butter-fat; equivalent to 53.9 lbs. or 26 quarts milk per day, and 14 and 1-6 pounds of the best creamery butter per week.

Eighteen pounds of butter-fat in seven consecutive days may be considered as a large amount for any cow to produce, and this amount is seldom exceeded by cows of any other breed than Holstein-Friesian. During the past year 71 H.-F. cows one-fourth of which were not yet of full age, exceeded 18 lbs. of butter-fat in one week under official test. No one will deny that 18 lbs. of butter-fat will make 21 lbs. of the best butter; and that is at the rate of three pounds of butter per day. The 71 cows produced 38,406 lbs. of milk, containing 1,402,826 lbs. of butter-fat; showing an average of 3.65 per cent fat. Each cow averaged 540.9 lbs. of milk containing 19,758 lbs. butter-fat; equivalent to 77.3 lbs. milk or 37 quarts daily, and 23 lbs. of best butter per week. Comment on such a showing is superfluous.

In this issue of the Official Reports, Gretchen Lyons, 18,433 lbs. fat from 500.5 lbs. milk, heads the list; and while the yield is not remarkable as to production, when it is considered that the record was begun 76 days after freshening, and that the cow was milked but twice per day, averaging 36.3 lbs. milk, or 18 quarts at a milking, it becomes worthy of special mention.

Among the heifers, Netherland Johanna DeKol 3rd, 13,488 lbs. fat from 391.7 lbs. milk; Clothilde Lyons Pauline, 12,202 lbs. of fat from 397.2 lbs. milk; and Piebe Longfield Night, 12,022 lbs. fat from 340.4 lbs. milk, are noteworthy; and of these Clothilde Lyons Pauline was milked but twice per day.

Attention is called to all the "eight months records," as all are remarkably fine and show the staying powers of the breed; while the record of Pontias Columbo, begun over 18 months after calving, is very remarkable. This heifer, calving at 2 years, 5 months, 9 days, produced in seven consecutive days 444.4 lbs. milk containing 15,567 lbs. fat, and 1,700.5 lbs. milk, containing 61,088 lbs. fat, in 30 days; while tested 241 days from calving, she produced in 14 days, 601.3 lbs. milk containing 20,543 lbs. fat, and now tested again 567 days from calving, she produced 278.8 lbs. milk containing 10,422 lbs. fat in 7 days. It is stated that she was bred

(Continued to page 12)

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EASY TO OIL

STORY OF ROSE AND QUEEN.

Circular No. 103, by Wilbur J. Fraser, Chief in Dairy Husbandry, Illinois Experiment Station.

Rose is a bovine matron of rare attainments. She has been growing old now for several years, but has manifested no intention of retiring from the activity of a remarkable career. She has shown what character and achievement can be put into the routine of a quiet life. With a comely form and physical vigor, she has combined a high intelligence and a very amiable temper. While she has developed to the utmost a secretive disposition, this very thing has brought her into prominence. She has risen from the common herd and her fame has gone out from Urbana to the uttermost parts of the State, and beyond. Like most great men she had a good mother and she has improved upon this inheritance right well.

A Ten-Year Record.

The peculiar, perhaps unparalleled, record of this cow is that for ten years she has produced an average of 384 pounds of butter-fat or 448 pounds butter per year. This is 1.23 pounds butter for each and every day of the 365—yes of the 3,650 days. Her largest record for one year was the enormous yield of 580.6 pounds butter-fat—677.3 pounds, or more than one-third of a ton of butter. This was worth, at 22 cents per pound, \$149.

In the same herd is another cow bearing the unearned title of Queen, and she has another record—a six-years' record of 152 pounds butter-fat, or 177 pounds of butter per year. While this is almost a fourth better than the average cow in the United States, yet Rose produced two and a half times as much butter-fat as Queen for that long period. And in an exact comparison for one year, Rose made more than three times as much butter-fat as Queen from exactly the same feed, both in kinds and amount, and with the same care.

History of Rose.

Rose was purchased by the Experiment Station when she was four years old, and she is now past sixteen. She was picked up among the cows offered for sale at \$50. Her record here given is for ten years in succession, including the time when she was dry, and she has been doing practically as well since.

Her longest milking period in this time wast one year and eleven months, completed when she was fourteen and a half years old; her shortes, one year and ten days, and the average, one year five and a third months. In this time she produced seven calves, four of them being heifers.

One Income \$96; the Other \$38.

At 25 cents per pound for butter-fat—or 22 cents per pound for butter—the annual income from Rose is \$96, and that from Queen \$38. The income from Rose is \$58 more than that from Queen. But this does not represent the difference between these cows to a man in the practical dairy business.

If the market price of feed is such

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that it costs \$35 per year to keep a cow—and Queen's keep cost all of that—Queen would return an annual profit of \$3 and Rose a profit of \$1, or as much as twenty Queens. If the price of feed were \$37 per year, Queen's profit would be \$1, and that of Rose \$59, or as much as fifty-nine cows like Queen.

But if these cows should be better fed or the price of feed should advance so that it costs \$40 per year—not an unusual cost for a well-fed dairy cow—Rose would make a clear profit of \$56, while Queen would lack \$2 of paying her board and lodging. The greater the number of such cows as Queen, the farther they would be from equalling one Rose. It is figured that the calf, skim milk and manure are well worth the labor in caring for the cow.

This means that Queen is entirely out of the list of cows worth keeping; there is absolutely no business in keeping her a single day.

Rose's Record for Ten Years.

Butter-fat, 3,840 lbs. @ 25c....\$960.00
Skim milk, 73,526 lbs. @ 15c
per 100 lbs..... 110.29
Seven calves (four heifers) ... 50.00

Total income.....\$1,120.29
Cost of keep @ \$40 per year. 400.00
\$720.29

A Great Life Work.

This is a pretty good record for one cow, considering that there are at least three years besides these ten—and it remains to be seen how many more—yet to be added to her life achievement. The total clear profit from this cow is already beyond \$1,000.

In the ten years, Rose produced more than thirty-six tons of milk. Hauling a ton a day, it would take a man and two-horse team a month and a fifth to haul this milk.

Several Like Rose.

One can not go out and be sure of buying such a cow as Rose. If the seller knew he were parting with this kind of an animal at four years of age, the price should be about \$300 or \$400. But here and there her ten-year record is equalled, and even excelled, for a less number of years. In the same herd at the university is another cow that has produced 405 pounds butter-fat on the average for three years. She was bought from one of the dairy herds of the Elgin region for \$85. In eighteen Illinois herds, numbering 333 cows, three—or 1 per cent—were found to have a record for one year better than the average record of Rose. But in the same general class of excellent producers with Rose were found thirty in this 333—or 10 per cent that produced 300 pounds or more butter-fat in one year, and the average production of the thirty was 342 pounds, meaning an income of \$85.50. Cows of this kind can be bought at a reasonable price, and better and easier still they can be raised from the heifer calves of high-producing mothers.

A cow must give two and a half gallons of 4 per cent milk per day for nine months a year to be worth keeping. This means a total of 225 pounds of butter-fat, an income of about \$56 per year, and a profit of \$15 or more above the market value

of feed. And yet there are a multitude of cows in Illinois dairy herds below this standard. Of the 333 cows in 18 herds carefully tested by this station, 226, or over two-thirds, fell below this standard, and the 226 averaged 164 pounds butter-fat for the year—only 12 pounds above Queen. In three of these herds, numbering 47 cows, not a single animal came up to this standard.

A Queen With a Large Following.

But this Queen is of more interest to the farmer than may at first appear. She holds sway in a large realm. Some of her subjects are to be found on almost every dairy farm, but often they remain in easy disguise, forming a sort of secret society. And strange to say, their concealment is unwittingly provided by the owner himself—by his guessing at their production instead of weighing and testing the milk. But they are every one dead-beats and will never pay for their board. Their password is graft and their grip that of the sheriff. The more of them the farmer keeps the poorer he is. There is only one way to find out their record—to weigh and test the milk.

Among the 333 cows of the 18 Illinois herds referred to above, were found seventy-four—or 22 per cent—that were as poor as Queen or poorer, in production of butter-fat. More than every fifth cow of the 333 failed to earn her keep. The average production of these seventy-four was only 126 pounds of butter-fat—far below that of Queen.

Quite unsuspected these Queens have everywhere honeycombed dairy society, but they have no rightful standing in the stalls of bread-winners, and should be unmasked by the scales and test and sent to the only destination to which they have an honest ticket—without stop-over or return—the butcher's block. Look out for these idle, spendthrift Queens. They may not look much different from worthy cows, but they are different—vastly different.

THE BEST REMEDY FOR LICE.

In Minnesota Agricultural College Bulletin No. 22, just published, Prof. F. L. Washburn, Entomologist, says about remedies for lice on hogs, horses and cattle: "Zenoleum has been found to be one of the best insecticides to use for these parasites. For lice on hogs use one part Zenoleum to thirty of water. For lice on horses and cattle Zenoleum is used at the strength of twelve tablespoonsful to a gallon of water." Zenoleum Veterinary Adviser, a 64-page booklet, is intensely interesting. The Zenner Disinfectant Company, 49 Lafayette Ave., Detroit, Mich., will send it free. It's worth having.

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SALE DATES

- Poland-Chinas.**
Aug. 22—E. L. Jimison, Oneida, Ill.
Sept. 15—White and Metzger. (Sale at Council Bluffs, Ia.)
Sept. 22—Dr. H. Pritchard, Wisner, Neb.
Sept. 27—Ed. Holmes, Bedford, Ia.
Sept. 27—Jas. B. Turbett, Hanna City, Ill.
Sept. 28—E. E. Leighton, New Market, Ia.
Sept. 28—Prouty & Keeline, Council Bluffs, Ia.
Sept. 29—Rood & Fesenmeyer, Clarinda, Ia.
Oct. 2—C. J. Gabel, Louisville, Neb.
Oct. 3—William Penningroth, Tipton, Iowa.
Oct. 4—M. Bradford, Rosendale, Mo.
Oct. 5—Bergen Bros., Stanton, Ia.
Oct. 5—O. F. Applegate, Oakland, Ia.
Oct. 6—D. C. Loneragan, Florence, Neb. (Sale at Council Bluffs.)
Oct. 8—R. E. Williams, Oakland, Ia. (Shorthorns).
Oct. 8—E. E. Axline, Oak Grove, Mo.
Oct. 8—Wurtzel Bros., Beemer, Neb.
Oct. 9—A. J. Johnson, Oakland, Ia.
Oct. 9—Ira Cottingham, Eden, Ill.
Oct. 9—O. E. Wade, Rising City, Neb.
Oct. 10—R. A. Sanman, Glasford, Ill.
Oct. 10—C. S. Price, Carson, Ia.
Oct. 10—W. D. Fulton, Villisca, Ia.
Oct. 11—J. O. James, Braddyville, Ia.
Oct. 13—C. Q. Miller, Conway, Ia.
Oct. 15—Fleming & Schrader, Arbor Hill, Ia.
Oct. 15—A. J. Bunn, Kent, Ia.
Oct. 16—J. H. Wintermute, Blockton, Ia.
Oct. 16—Chas. E. Ogg, Auburn, Ill.
Oct. 17—J. H. Harvey & Son, Maryville, Mo.
Oct. 17—Williams Bros., Villisca, Ia.
Oct. 17—Ferd Friedly, Verdon, Neb.
Oct. 17—W. A. Pruitt, Asherville, Ks.
Oct. 17—J. L. Ewart, Grant City, Mo.
Oct. 18—W. A. Davidson, Simpson, Kan.
Oct. 18—P. C. Miller, Conway, Ia.
Oct. 19—Ed. Blauer, Mt. Ayr, Ia.
Oct. 20—W. R. Dowling, Norcat, Kan.
Oct. 20—H. C. Whitrock and Wm. Reischick, Falls City, Neb.
Oct. 23—J. M. Frazer & Sons, Fort Crook, Neb.
Oct. 24—C. Lionberger, Humboldt, Neb.
Oct. 24—F. L. Rood, Clearfield, Ia.
Oct. 24—J. L. Miller & Sons, Brooklyn, Ia.
Oct. 24—T. F. Walker, Alexandria,

BLOODED STOCK

- Neb.**
Oct. 24—F. A. Dawley, Waldo, Kan.
Oct. 25—D. W. Bingman, Clay Center, Kan.
Oct. 25—Jno. R. Triggs, Dawson, Neb.
Oct. 25—D. O. Miller, Eldora, Ia.
Oct. 27—J. C. Meese, Comstock, Neb.
Oct. 30—J. M. Baker, Narka, Kan.
Oct. 30—W. L. McNutt, Ord, Neb. (Sale at Grand Island, Neb.)
Oct. 30—G. B. Lobb & Son, Clay Center, Neb.
Oct. 30—Leon Calhoun, Potter, Kan. (Sale at Atchison, Kan.)
Oct. 4—H. A. Sexsmith, Greenfield, Ia.
Oct. 5—Arch Brown & Sons, Waterloo, Neb.
Oct. 5—F. A. Strong, Orient, Ia.
Oct. 5—Edgar Phillips, Onward, Ind.
Oct. 5—C. E. Kimm, Blairstown, Ia.
Oct. 6—H. C. Pfander, Clarinda, Ia.
Oct. 8—O. C. Unger, Forest, Ind.
Oct. 9—J. E. Smith, Victor, Ia.
Oct. 9—Frank Campbell, Tipton, Ind.
Oct. 9—August Voge, Portsmouth, Ia.
Oct. 10—F. H. Herring, Iowa City, Ia.
Oct. 10—Chas. G. McGinnis, Stuart, Ia.
Oct. 11—Grant Harris, Orient, Ia.
Oct. 11—F. M. Erchen, Odell, Ill.
Oct. 11—W. A. Foster, Greenfield, Ia.
Oct. 11—W. F. Stout, Delta, Ia.
Oct. 12—E. McGlasson, Princeton, Ill.
Oct. 12—E. J. Ewing, Bridgewater, Ia.
Oct. 12—Clark Tompkins, Shenandoah, Ia.
Oct. 12—C. Moore & Son, Kellerton, Ia.
Oct. 13—Aug. Sonneland, Harlan, Ia.
Oct. 15—Eikenberry & McNeil, Flora, Ind.
Oct. 15—A. Wilson, Bethany, Neb.
Oct. 15—Lynch Bros., Mt. Ayr, Ia.
Oct. 16—John M. Morrison, College View, Neb.
Oct. 16—Taylor & Son, Kokoma, Ind.
Oct. 16—L. L. Overholser, Diagonal, Ia.
Oct. 16—E. M. Castle & Son, Joy, Ill.
Oct. 16—T. P. Teargarden, Wayne, Kas.
Oct. 16—J. W. & Earl Taylor, Kokoma, Ind.
Oct. 16—M. S. Moats & Son, Randolph, Neb.
Oct. 17—W. A. Kirkpatrick, Lincoln, Neb.
Oct. 17—Z. I. Grout, Tingley, Ia.
Oct. 17—T. H. Isaac, Red Oak, Ia.
Oct. 17—John Black, Randolph, Neb.
Oct. 18—Hurlbutt & Rassmussen, Owaneco, Ill.
Oct. 18—Jacob Somsel, Galveston, Ind.
Oct. 18—C. A. Wright, Rosendale, Mo.
Oct. 18—Gilbert Van Patten, Sutton, Neb.
Oct. 18—Dewey & White, Shannon City, Ia.
Oct. 18—B. R. Miller, Randolph, Neb.
Oct. 18—J. O. Reece, Eldora, Ia.
Oct. 19—Geo. R. Manifold, Shannon City, Ia.
Oct. 19—Geo. Briggs & Son, Clay Center, Neb.
Oct. 19—W. C. Holmes, Osmond, Neb.
Oct. 20—H. G. Warren, Inland, Neb.
Oct. 20—Fred Snyder, Galveston, Ind.
Oct. 20—M. Mihills, Norfolk, Neb.
Oct. 22—M. W. Greer & Son, Rushville, Ill.
Oct. 23—H. S. Sheller & Son, Eldora, Ia.
Oct. 23—T. E. Laurie, Jacksonville, Ill.
Oct. 24—O. S. Gilbert, Conrad, Ia.
Oct. 24—Geo. W. Seckman, Ripley, Ill.

- Oct. 25—Manlove Bros., Bowen, Ill.
Oct. 25—L. P. Hovious, Cromwell, Ia.
Oct. 25—Balmat & Son, Mason City, Ia.
Oct. 25—Thomas & Hogsett, Golden, Ill.
Oct. 26—B. C. Marts, Polk City, Ia.
Oct. 26—Manlove Bros. & Griffiths, Bowen, Ill.
Oct. 27—A. P. Alsin, Boone, Ia.
Oct. 27—A. J. Stevenson, Mt. Ayr, Ia.
Oct. 27—Cutler, Reil & Cooper, Carthage, Ill.
Oct. 30—John Holste, Massena, Ia.
Oct. 30—McNeil Bros., Bowen, Ill.
Oct. 31—Fagan, Browning, Hess & McCabe, Ripley, Ill.
Oct. 31—C. W. Mathes, Bridgewater, Ia.
Nov. 1—E. D. Harris, Fontanelle, Ia.
Nov. 1—Ed. A. Baxter, Pawnee, Ill.
Nov. 2—J. S. Lovejoy, Falmouth, Ind.
Nov. 2—Fred Kraschel, Macon, Ill.
Nov. 3—J. Coy Roach, Girard, Ill.
Nov. 3—Ernst L. Humbert, Corning, Ia.
Nov. 3—Nash & Kimmons, Pickering, Mo. (Sale at Maryville.)
Nov. 6—Geo. M. McMurry, Maryville, Mo.
Nov. 6—F. M. Smith, Panora, Ia.
Nov. 7—Thos. Johnson, Columbus, O.
Nov. 7—H. B. Ayres, Eldora, Ia.
Nov. 8—S. S. Puckett, Yellow Springs, O.
Nov. 8—W. A. Staples & Son, Glidden, Ia.
Nov. 12—Geo. M. McMurry, Maryville, Mo.
Nov. 13—T. J. Hamilton, North Bend, Neb.

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DIRECTORY OF BREEDERS' ASSOCIATIONS.

The following list comprises the name of every live stock breeders' association in the United States, of which we have record. The name and address of secretary will also be found in every case. If any associations of this kind are not listed, we ask that secretaries notify us at once, and also notify us at once as to any change in names and addresses. It will be the intention to keep this list up to date, and we ask for the co-operation of secretaries to that end.

- Cattle Breeders.**
American Aberdeen-Angus Breeders' Association—Thomas McFarlane, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Branch Association of the North Holland Herd Book—N. F. Sluiter, Brooklyn, N. Y., Secretary.
American Devon Cattle Club—L. P. Sisson, Newark, O., Secretary.
American Galloway Breeders' Association—Chas. Gray, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Guernsey Cattle Club—W. H. Caldwell, Peterboro, N. H., Secretary.
American Hereford Breeders' Association—C. R. Thomas, Stock Yards, Kansas City, Mo., Secretary.
American Jersey Cattle Club—J. J. Hemingway, New York, Secretary.
American Noarmandy Herd Book Association—E. G. Kramer, New York, Secretary.
American Polled Durham Breeders' Association—Fletcher S. Hines, Indianapolis, Ind., Secretary.
American Simmental Herd Book Association—E. G. Kramer, New York, Secretary.
American Short-Horn Breeders' Association—John W. Groves, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Sussex Breeders' Association—Overton Lea, Nashville, Tenn., Secretary.
Ayrshire Breeders' Association—C. M. Winslow, Brandon, Vt., Secretary.
Breeders' Association of French-Canadian Cattle of the United States—W. J. McMurry, Binghamton, N. Y., Secretary.
Brown Swiss Cattle Breeders' Association—N. S. Fish, Groton, Conn., Secretary.
Dutch Belted Cattle Association of America—H. B. Richards, Easton, Pa., Secretary.
Holstein-Friesian Association of America—F. L. Houghton, Brattleboro, Vt., Secretary.
Maine State Jersey Cattle Association—N. R. Pike, Winthrop, Maine, Secretary.
National Polled Hereford Breeders' Association—A. E. White, Chicago, Secretary.
Red Polled Cattle Club of America (Incorporated)—Harley A. Martin, Gotham, Wisconsin, Secretary.
Horse Breeders.
American Association of Importers and Breeders of Belgian Draft Horses—J. D. Connor, Jr., Wabash, Indiana, Secretary.
American Breeders' Association of Jacks and Jennets—J. W. Jones, Columbia, Tenn., Secretary.
American Clydesdale Association—R. B. Ogilvie, Union Stock Yards, Chicago, Secretary.
American Hackney Horse Society—A. H. Godfrey, New York, Secretary.
Percheron Society of America—Geo. W. Stubblefield, Union Stock Yards, Chicago, Secretary.
American Saddle Horse Breeders' Association—I. B. Nall, Louisville, Ky., Secretary.
American Shetland Pony Club—Mortimer Levering, Lafayette, Indiana, Secretary.
American Shire Horse Breeders' Association—Charles Burgess, Wenona, Ills., Secretary.
American Stud Book (Thoroughbreds)—James E. Wheeler, N. Y., Registrar.
American Trotting Register Co.—W. H. Knight, Chicago, Secretary.
American Suffolk Horse Association—Alexander Galbraith, Janesville, Wis., Secretary.
Cleveland Bay Society of America—R. P. Sterlecker, West Orange, N. J., Secretary.
French Coach Horse Society of America—Duncan E. Willett, 2112 Michigan Ave., Chicago, Secretary.
German Hanoverian and Oldenburg

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- Coach Horse Breeders' Association**—J. Crouch, Lafayette, Ind., Secretary.
Morgan Horse Register—Joseph Battel, Middlebury, Vt., Editor.
National French Draft Horse Association—C. E. Stubbs, Fairfield, Iowa, Secretary.
Oldenburg Coach Horse Association of America—E. Stubbs, Fairfield, Iowa, Secretary.
Sheep Breeders.
American Angora Goat Breeders' Association—John W. Fulton, Kansas City, Mo., Secretary.
American Cheviot Sheep Society—F. E. Dawley, Fayetteville, N. Y., Secretary.
American Cotswold Association—Frank W. Harding, Waukesha, Wis., Secretary.
American Leicester Breeders' Association—A. J. Temple, Cameron, Ills., Secretary.
American Milch Goat Record Association—W. A. Shafer, Hamilton, O., Secretary.
American Oxford Down Association—W. A. Shafer, Hamilton, O., Secretary.
American Rambouillet Sheep-Breeders' Association—Dwight Lincoln, Milford Center, O., Secretary.
American Shropshire Registry Association—Mortimer Levering, Lafayette, Ind., Secretary.
American Southdown Breeders' Association—Frank S. Springer, Springfield, Ills., Secretary.
American Suffolk Flock Registry Association—George W. Franklin, Des Moines, Iowa, Secretary.
American Tunis Sheep-Breeders' Association—Charles Roundtree, Crawfordville, Ind., Secretary.
Black-Top Spanish Merino Sheep-Breeders' Publishing Association—R. P. Berry, Clokey, Pa., Secretary.
Continental Dorset Club—Joseph E. Wing, Mechanicsburg, O., Secretary.
Dorset Horn Breeders' Association of America—M. A. Cooper, Washington, Pa., Secretary.
Franco-American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.
Hampshire Down Breeders' Association of America—C. A. Tyler, Nottawa, Mich., Secretary.
Improved Black-Top Delaine Merino Sheep-Breeders' Association—O. M. Robertson, Eaton Rapids, Mich., Secretary.
Improved Delaine Merino Sheep-Breeders' Association—George A. Henry, Bellefontaine, O., Secretary.
International Delaine Merino Sheep Record—U. C. Brouse, Kendallville, Ind., Secretary.
International von Homeyer Rambouillet Club—E. M. Moore, Orchard Lake, Mich., Secretary.
Interstate and International Polled Dickinson Registry—H. G. McDowell, Canton, O., Secretary.
Michigan Merino Sheep Breeders' Association—E. N. Ball, Hamburg, Mich., Secretary.
National Delaine Merino Sheep-Breeders' Association—John B. McClelland, Cannonsburg, Pa., Secretary.
National Lincoln Sheep-Breeders' Association—Bert Smith, Charlotte, Mich., Secretary.
National Merino Sheep Register Association—R. O. Logan, California, Mich., Secretary.
National Shropshire Record Association—S. J. Weber, Middleville, Mich.
New York State American Merino Sheep-Breeders' Association—J. Horatio Earl, Skaneateles, N. Y., Secretary.
Standard American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.
Standard Delaine Spanish Merino Sheep-Breeders' Association—S. M. Cleaver, West Brownsville, Pa., Secretary.
United States Merino Sheep Registry Association—J. A. B. Walker, Mount Air, Pa., Secretary.
Vermont Merino Sheep-Breeders' Association—C. A. Chapman, Ferrisburg, Vt., Secretary.
Swine Breeders.
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American Duroc-Jersey Swine Breeders' Association—S. E. Morton, Camden, O., Secretary.
American Essex Association—F. M. Stoull, McLean, Ills., Secretary.
American Poland-China Record Co.—W. M. McFadden, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Tamworth Swine Record Association—E. N. Ball, Hamburg,

- Mich., Secretary.
American Hampshire (Thin-Rind) Swine Record Association—E. C. Stone, Armstrong, Ill., Secretary.
American Yorkshire Club—H. G. Krum, White Bear Lake, Minn., Secretary.
National Poland-China Record Co., A. M. Brown, Winchester, Ind., Secretary.
International Record Association Co., H. A. Jones, Penn Yan, N. Y., Secretary, International for all breeds and countries.
Cheshire Swine-Breeders' Association—R. B. Radger, Ouaquaga, N. Y., Secretary.
Improved Small Yorkshire Club of America—F. B. Stewart, Espyville, Pa., Secretary.
National Berkshire Record Association—E. K. Morris, Indianapolis, Ind., Secretary.
National Chester White Record Association—Thomas Sharpless, West Chester, Pa., Secretary.
National Duroc-Jersey Swine-Breeders' Association—Robert J. Evans, Peoria, Ill., Secretary.
O. I. C. Swine Breeders' Association—C. M. Hiles, Cleveland, O., Secretary.
Southwestern Poland-China Record Association—H. P. Wilson, Gadsden, Tenn., Secretary.
Standard Chester White Record Association—W. H. Morris, Indianapolis, Ind., Secretary.
Standard Poland-China Record Co.—George P. Woodworth, Maryville, Mo., Secretary.
United States Small Yorkshire Association—D. T. Bascom, California, Mich., Secretary.
Victoria Swine-Breeders' Association—H. Davis, Dyer, Ind., Secretary.
American Chester White Record Association, Earnest Freigau, Dayton, Ohio, Secretary.

FINE DUROCS AT PUBLIC SALE.

John Schowalter, the enterprising and one of the best breeders of Nebraska, is going to sell at Cook, Neb., September 27, one of the finest, if not the best, bunch of fine Duroc-Jersey swine that ever went through a sale ring. This offering has great attractions; it includes Golden Banner 40497, the fine yearling boar sired by the first prize yearling at St. Louis World's Fair. He is a fine one, will make a very large hog and a good breeder; the smallest litter he ever sired was eight pigs. Banner Top, 119100, sired by Champion Tip Top Notcher 20729, is a fine large yearling sow and should go into the best herd in the land. Crimson Wonder Belle, 119096, sired by the great Crimson Wonder, is a fine yearling sow and good producer. Queen Cedarvale, 119090, sired by Golden Rule 14101, is a fine yearling sow, and bred for early fall litter. West's Diamond, 119106, sired by Noble Ring, 25041, is a good one—a yearling of best brood sow type. Miss Major R., 119104, sired by Major R., 29163, is a good yearling sow—raised ten fine pigs this spring. Red Cedar, 119094, sired by Royal Triumph, 34581, is a top yearling sow and good producer also.

There are other breeds, all of the very best blood lines, such as Improver 24, Coles Duroc and others. All tried sows have raised large litters—10 yearling sows sired 92 live pigs. The spring pigs that go in this sale are only the tops of the Golden Banner Herd—about 45 or 50—both males and gilts. They all combine quality and size and will weigh about 200 pounds in smooth condition at 6 months old, and will make fine producers. Try to arrange early to attend this great Duroc sale—it will be an important event in south-eastern Nebraska. Don't forget the date—September 27th. Catalogues will be out about September 1st. Send your name now for mailing list and you will receive one. You can send your bids by mail also and you will be treated right. For any other information write the proprietor, John Schowalter, Cook, Nebraska.

We do all kinds of Job Printing. Send us your work, it will be promptly done. Write us about it.

BLOODED STOCK THAT POTBELLED PIG

Many years ago it was common to let the young cattle winter around the straw stack and in the stalk fields.

It was also the practice of the same farmers to let the sows raise their pigs in the clover fields or blue grass pastures or woods—getting no corn or mill feed after clover and grass was big enough to graze. The result was, the calves' and young steers were big in the middle and light in their quarters, ribs and back bone prominent. The young pigs, that the sow had weaned, and had been compelled to live on grass and clover and whatever they could root for, were by midsummer big in the middle, and small in the quarters, hair rough, and discomfort shown in their lifeless gait. The farmers felt their pigs were costing them little or nothing for feed, and consoled themselves with the thought that even the feed was mostly returned to the land, in droppings where the pigs and calves picked up their living.

The farmers also told us the pigs were making bone and frame, and stomachs that would digest the great loads of corn, as soon as that was ready to feed.

Corn was cheap, and the steer that could stow away a hundred bushels, and the hog that could load up one-fourth as much, and carry it to the market, were considered meat makers, and freight savers.

Times have changed. Lands and corn are more costly, and this generation has had to study the feeding problem more closely than our fathers did.

They had not heard of balanced rations and protein and carbohydrates and crude fiber. They did not know that the cause of the pot belly on the calf at the straw stack, and the pot belly on the pigs in clover in August and September, was too much crude fiber and too little of the fat and muscle formers.

Straw is a good thing and corn is a better thing, but neither alone is as good as a mixture of the two. But even the mixture is not a perfect ration. The clover and blue grass of early summer are more succulent and have less crude fiber and more fat and protein than the dry woody

plants of late summer.

The farther any feed is from a well balanced ration the less digestible and the more of it must be consumed to sustain life. The old idea that this wintering on straw and summering on woody grass developed the digestive powers of the growing animal has not been proven. At least it is sure that animals so fed are not able to assimilate enough nutrition for a harmonious development of body.

The Digger Indian was noted for his vast abdomen and shrunken limbs. The reconcentrado, under Weyler's regime of scant rations in the Cuban revolution, were deformed by swollen abdomens and shrunken limbs and enfeebled bodies. They were the easy prey of disease, and weak digestion was indicated by chronic diarrhoea and premature death.

Our pot-bellied pigs and calves are in the same category, weak in body, short of nutrition and easy prey for any epidemic disease.

The corn feeder doubtless congratulates himself that his pigs have all the corn they can eat, and there is no better or richer food.

Yes it is richer in fats and protein and poorer in crude fiber than old clovers and grasses, but it is not the balanced ration that is most economical and that gives the most harmonious development and cheapest growth. A mixture of middlings and corn, or milk and corn and corn and alfalfa leaves or clover leaves, is far cheaper feed than corn alone, or than clover and grass alone, simply because the mixture meets the demand of nature, giving with the needed bulk, the necessary portions of fat and protein.

How often do we see among a lot of pigs that are having all the corn they can eat, some of them pot-bellied and unthrifty.

This condition is very common a few weeks after weaning, and is seldom seen so long as the sow is with them giving a good portion of milk. Even a little milk from the dam helps to balance the ration so the pigs can assimilate enough nutrition to keep harmonious growth.

is the time to decide. If you have plenty of ensilage your troubles are ended before they have begun; but if you neglected to build one and are still wandering along in the old high priced fashion, your troubles are looming up in the near future.

Haven't you got a two-acre lot somewhere that you don't hardly know what to plant in it? Just try sweet corn and feed it to your cows when the grass begins to turn brown; or better, just before it begins. If you don't happen to have a lot suitable for the purpose, then plant an acre or two next to the outside in the cornfield. It will make more profit than any other part of the field.

We always found the worst trouble about letting the cows shrink in their milk at this time. Every dairyman knows that it is much more difficult to increase the flow of milk than it is to decrease it. Then why not arrange to have some soiling feed

After the sow's milk fails we need to supply the pigs a substitute for it, but more corn is not the best or the cheapest thing. If we can not get milk, then get wheat middlings, and a creamy slop of this with a little oil cake meal, is a vast help towards balancing the ration. Now if with this added slop, the weanlings can have a run to grass or clover they will not become pot-bellied, though they take into their stomachs a greater amount of feed, than they would of corn alone, or grass or clover alone.

The runt pig of a litter is usually the one that gets very little milk from the sow, and he is usually pot-bellied, although he may not be eating as much as his litter mates, that are of better form. The runt with the pot-belly is telling us he is not assimilating his food from some cause. It may be he was not strong at birth, or got a poor teat, and has weakened under the shortage of milk, until he tried in his desperation of hunger to eat swill before his stomach could digest it. He became the early victim of indigestion and that means faulty assimilation and fermentation and unnatural distension of bowels.

His figure tells the story of starvation as clearly as the big abdomen and shrunken limbs of the starving Cuban under Weyler's inhuman treatment.

The lesson is clear. As soon as we see a tendency among our weaned pigs to become pot-bellied it is time to change our way of feeding. We are not getting the growth possible or are our pigs making the harmonious growth of muscle and frame that tells of perfect health and perfect assimilation and cheapest growth.

The nearer we can balance the ration the less our feed costs us for every pound of growth. It may be economy to buy middlings, although we have corn to sell. It always pays to have all the grass or clover or alfalfa or other green feed the pigs will eat after generous feeding of corn or mill feed or both.—P. C. Holme in American Swineherd.

to held through the short grass period and not let them decrease?

Now is the time to get in your subscription. Attend to it at once.

Kendall's Spavin Cure

has never had an equal in the world for curing common horse ailments, such as Spavin, Ringbone, Curb, Splint and Lameness.

A Cure for Spavin.
Washington Guide, Sept. 8, 1904.

Dr. B. J. Kendall Co.
Dear Sir:—Enclosed find a 2 cent stamp for your book, "A Treatise on the Horse and his Diseases."

I have used your Spavin Cure and found it a sure cure for Spavin.

Yours respectfully, W. James Rippey.

Price \$1.00 for 80¢. Greatest known treatment for family use. All druggists. Accept no substitute. "Treatise on the Horse," free from druggists or

DR. B. J. KENDALL COMPANY,
Enosburg Falls, Vermont.

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN CATTLE.

(Continued from page 5)

4½ months before beginning the last record. Queen Ormsby is entered in the semi-official yearly test, conducted by the Wisconsin Agricultural College; and in addition to the two official records, she will have a semi-official yearly record for her lactation period.

In the last issue the printers made Pontiac Rag Apple's great record read as the "third" best H-F. official record, where it should have read second best.

SUMMER SOILING.

V. D. Macy, in the Jersey Bulletin, writes wisely as follows:

What are you going to use to supplement your pasture with during the latter part of the season? Now

To the Poland-China Breeders of the United States

We wish to announce the reorganization of the American Poland-China Record Company, which has been recently effected by incorporating under the laws of the state of Illinois, and under the corporate name of American Poland-China Record Association.

For a number of years there has been a great amount of sentiment manifested among Poland-China breeders that one of the most desirable things in connection with the business would be one record or a consolidated record for Poland-Chinas. It can be safely asserted that there is a very nearly unanimous opinion among breeders of Poland-China Swine that there should be but one record for the breed. Considerable discussion has taken place, and no small amount of effort has been put forth to bring about a union of all the Poland-China records, but it has appeared that no feasible plan has been devised to bring about this much desired result.

The confusion and thousands of errors that result from the present plan, and which could be avoided with only one record, has not appeared to be a reason strong enough to overcome local pride and jealousies. Not even the fact that a union of Poland-China interests and a "pull all together" would, without a doubt, do more than any other one thing to advance the interests of the breed, has been a sufficient reason for bringing about a consolidated Poland-China record.

Probably about the greatest hindrance to the getting together of Poland-China men has been caused by the fact that there never has yet been held a meeting of Poland-China breeders thoroughly national in its character. The meetings of all of the various record companies, including the American, have been very largely of a local nature. The places at which these meetings have been held have prevented an attendance that was very much more than merely a local gathering. The principal reason for the reorganization of the American record has been so as to provide a meeting place that will permit of, and most likely result in, such a meeting of Poland-China breeders as has never before been held—a meeting not only large in numbers but national in character, and representing all sections of the hog breeding country.

We think that an annual meeting of this kind will exert a powerful influence for the best interests and advancement of the breed, even should it not eventually result in a consolidated Poland-China Record, as we hope and believe it will. Under the new organization, the annual meeting of the American Record will be held in Chicago in November or December, during the International Stock Show. This provides not only a very accessible place of meeting, but insures the advantage of the reduced railroad rates, always granted to the stock show. More than this, the Record meeting will not be the

only interesting thing to attend, while taking the time and going to the expense of coming to the meeting.

We deem this a proper time and place to say a few words regarding the American Record and its business and policy. The American-Poland-China Record records fully 60 per cent of all the Poland-China pedigrees recorded. It does considerably more business than all the other Poland-China Records combined. The growth of its business will be indicated by the following figures. The figures represent the full amount of business transacted for the previous twelve months, as reported at the various meetings for the past seven years:

Meeting of 1900.....	\$ 5,128.70
Meeting of 1901.....	6,912.60
Meeting of 1902.....	8,016.45
Meeting of 1903.....	10,207.50
Meeting of 1904.....	13,662.37
Meeting of 1905.....	14,978.45
Meeting of 1906.....	18,054.81

These figures indicate that the American is not only the leading swine Record, but that there is only one live stock record in the world for any kind or breed of stock that transacts a larger wholesale business or records more pedigrees than the American Poland-China Record. We have a surplus on hand amounting to about \$15,000, and this is constantly growing. We have a membership of something over 1,200, having a creditable representation in all the leading swine states. We publish five or six volumes of 1,000 pages each per year, and these volumes are sent free to our stockholders, and enable those interested to trace the pedigrees of animals in all the leading herds in the country.

For a number of years the American Record, through its management, has announced its willingness to sanction any just and feasible plan for the union or consolidation of Poland-China Records. It stands committed to a policy of fairness and concession along this line. Notwithstanding the fact that its meetings have always been largely dominated by the Iowa breeders, the Secretary's office has moved from the state and lately the Iowa charter surrendered and the reorganization made under the laws of Illinois. These facts we think warrant us in saying that the American is the only record which has made any substantial concession or progress toward the idea of the united Record.

We invite those who endorse the idea of a single Poland-China Record to become members of the American Poland-China Record Association. This can be accomplished by purchase of a share or by exchange of a share in other Record companies. We particularly invite all Poland-China breeders to attend our next annual meeting, which will be held in Chicago in December, during the International Stock Show, and which we think will be the greatest meeting of breeders of Poland-China swine that ever has been held in the world. Arrangements are being

made, independent of the Record meeting, to celebrate this, the first national meeting of Poland-China men in a fitting manner.

A. J. Lytle, Oskaloosa, Iowa.
H. E. Singleton, McKinney, Texas.
J. M. Stewart, Ainsworth, Iowa.
E. L. Jimison, Oneida, Ill.
B. L. Gosick, Fairfield, Iowa.
F. H. Wieneke, Marion, Iowa.
G. E. Leslie, Memphis, Mo.
C. J. Fawcett, Springdale, Iowa.
Ed. Kleeveer, Springdale, Iowa.

The foregoing is published by request of the officers of the American Poland-China Record Association.

DISEASES OF EYE IN SHEEP.

Sheep are subject to a special disease of the eyes commonly called Enzootic ophthalmia. This term means simply inflammation of the eyes which effect animals all through any wide locality. This disease is any wide locality. This disease is one which no one so far has as yet been able to explain as to its true origin; and it gives the shepherd much troublesome anxiety. It may suddenly appear in a flock at any season of the year and without any apparent cause. The symptoms are those of simple inflammation of the eyes, but much more severe than the ordinary form of this; and it is, as well, accompanied by much fever and also blindness, due to the exudation into the body of the eye, but mostly into the cornea or front of the eye ball in and around the pupil. This quite often results in blindness more or less complete, and to much loss of condition, due to the pain and prostration caused. It mostly happens in the spring and fall, and some close and experienced observers have come to the conclusion that it is caused by the inflammatory effect of the abundant pollen of the blossoms of trees, shrubs and smaller plants, at the season when the air is filled with this irritating matter. All pollen

(Continued on page 16)

CAR-SUL

The Disinfectant Dip That is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

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on care of hogs and other live stock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

Trial gallon \$1.50, express paid; 5 gallon can \$6.00, freight paid.

Moore Chemical & Mfg. Co.
Manufacturers of Disinfectants. 1501 S. Broadway St., Kansas City, Mo.

VETERINARY DEPARTMENT.

C. D. SMEAD, V. S., Editor

Professional advice given free to all subscribers through this department of Blooded Stock. Always describe symptoms, age, etc., as accurately as possible. Whenever you want prompt personal advice by letter and not for publication enclose One Dollar (\$1.00) fee. To derive the greatest benefits from this department preserve regular files. Always send your full name, post office, county and state with each inquiry direct to Blooded Stock, Oxford, Pa.

IMPROVEMENT OF DAIRY HERDS.

The whole building of a successful dairy herd consists upon the foundation stone of an ample, economic milk supply, and it seems to me that farmers have been content with getting a fairly good yield from a whole herd of animals without paying sufficient attention and without realizing that every individual cow, every single one, must be made a profit-making animal. The whole measure of success in the dairy business, the whole measure of profit depends upon an intelligent answer to this searching and proper question, "Is every cow in the herd making a profit for you?"

Now I submit that can never be answered simply by testing the herd occasionally, but every dairy farmer who wishes to consider himself business-like and be up-to-date in his methods must test systematically the production of every individual cow, and weed out the poor ones before he can have a profitable herd. The first step in this matter is thinking about it, getting interested in it, and when you make the test, unless the cow is producing enough to pay for the cost of feeding, no amount of reasoning and no amount of sentiment can make her a profitable animal. The profit will depend upon these three things: Yield of milk, per cent of fat and the cost of feeding.

I would like to quote as an example, an experiment made in Pennsylvania, where 101 dairies were tested and 58 of them show an actual loss; 1,900 cows were tested in Vermont, and 69 of the owners of those cows were actually receiving less from the factory than the cost of the feed, and I would like you to note that these were not grade or scrub animals, but half of them were of the recognized dairy breeds, Jerseys, Guernseys and Ayrshires.

Look at this thing in another way. Take the cost of a pound of fat, or 100 pounds of milk. I have culled some figures from the work done in the State of Illinois, and taking these from good cows, the cost runs from 6½ to 13½ cents, and with poor cows the cost runs all the way from 14 to 52 cents. On an average it takes 25 cents to produce a pound of fat, which a farmer sells for 19 to 20 cents. There is no money in that. Surely no more striking proof can be given to you, how easy it is to lose money with cows unless you know just what they are doing.

It seems to me that every farmer in Canada should be interested in this matter of the individual production of each cow. There should be

BLOODED STOCK

no indifference whatever on the part of any man. It has been proved time and again, by a number of tests made in the United States and Canada, that a great many cows are kept at too small a margin of profit, and that many are kept at an actual loss; and I wish to say that I am convinced that the average production of the dairy cow in Canada can be doubled inside of a few years if the farmers would go at the work in a systematic manner. It can be done with little expense to the farmer, and no one should hesitate two minutes in this matter. We will provide every farmer with a sample bottle for each cow and a spring balance, which can be purchased for \$1.25 to \$1.50. It is not a legal balance for trade purposes, but it can be used for household purposes. And by having things so arranged in the stables that the tests can be taken six times a month, it will only take an ordinary handy man about one minute to put the milk into the bottle, which is fitted with a screw cap, and the bottle only costs five cents. In that way you will have a record of each cow for the year, and the Minister for the Dominion has undertaken that where any twenty farmers will agree to weigh the milk on that proposition, three days during the month, that is six milkings, and take samples, the department will do the testing free of cost.

I am exceedingly happy to state that we had the pleasure of forming the first Cow Testing Association in Canada last Saturday, and I will leave you to say where the second district is to be. The prime requisite is an interest in the matter. You are already interested in it, from the very fact that you are dairy farmers, and you should investigate and see that the unprofitable animals are taken out of the herd and disposed of. I think this is a most crucial question in dairy farming. It is just on this very point where profit begins, and it is a matter of the utmost moment. It seems to me to lie at the very root and foundation of successful dairying. First of all, you determine the merits of each individual cow by weighing the milk and ascertaining the percentage of fat and the cost of feed, and only when these are known can you be sure whether the animal is a source of profit or loss to you, then you should cull out the poor cow and get rid of her altogether. It is stated that the farmers in Illinois, where they made this very poor test, were in the habit of sweeping off the cows to get the snow and ice from their backs before milking, and you cannot expect the cows to do good work in such quarters as that.

Now I want to turn to Denmark, that little country that has about the same population as the Province of Ontario, but Ontario is thirteen times as large. In that little country they realize the importance of agricultural education, and they have forty-four dairy schools. They have a hungry, sandy soil, and it is exposed to the German ocean on one side and the icy Baltic on the other side. The summer is short and dry, so that it is not particularly well adapted to dairying; and yet last

year they had \$20,000,000 worth of agricultural produce, and imported one million tons of oil cake and bran to feed their cattle. Their wonderful agricultural progress is the result of splendid co-operation and organization. They realize there, as we should here, that individual progress is bound up with the progress of the whole people. The condition of the farmer here is exactly the same as it was there; the needs of one is the need of all, and the ambition of all. We need to apply the excellent principles of co-operation to agriculture, and the farmers should work together and improve at the same ends. Now most of us are long enough out of school to have forgotten that the agriculture of Denmark is the result of forty years' work. The Prussian war left them with a poor country, and by moving together, each for all, with regard to these tests, they have carried on the work to a marvelous degree; and now there are 9,000 farmers engaged in testing 165,000 cows every day of the year, and I assure you it will pay you to do the same thing in Ontario. One of the results has been that inside of this year they have increased the average of the milk production from 5,500 to 6,500 lbs. of milk, that is an increase of 821 pounds with 50,000 cows. That is the record of one little group of creameries. I very much question if you could get 50,000 cows in Ontario that are producing 6,500 pounds of milk in one district, and that is the record of one association in Denmark.

Let me give you one or two results of what is being done along this line in the district of Cowansville. One farmer there began taking the records of the animals in his herd, and inside of eight years he had more than doubled his average production of butter. He had increased from 125 pounds to 254 pounds per animal, and he has now purchased a ten-bottle machine for his own use, and he is doing his own testing on the farm. He is not asking the government to do it.

A man in Nova Scotia has more

Sure Cure.

Elmira, N. Y., Jan. 31, 1906.
Dr. J. B. Kendall Co.,

Enosburg Falls, Vt.
Dear Sirs:—Please send me your book, "Treatise on the Horse and His Diseases." I have used your Spavin Cure for splints and spavins, and find it a sure cure. I would not be without it. Yours respectfully,
Mrs. N. I. Dwight.

No More Blind Horses For Specific Ophthalmia, Moon Blindness and others Sore Eyes, BARRY CO., Iowa City, Iowa, have a cure.

CONSULT YOUR LAWYERS BY MAIL

Legal Consultation \$1.00. Ascertain your rights. Understand your liabilities. Overcome your difficulties. Safeguard your property. Avert disaster. Avoid litigation. Secure your interests. Protect your family. Perfect your title. Insure your inheritance. Relieve your mind of worry, trouble, uncertainty, doubt. Bank and court references. **ASSOCIATED LAWYERS COMPANY** Old South Building, Boston, Mass.

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BLOODED STOCK

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent or exchange, poultry, poultry supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants, and vegetables. The cost of advertising is

Only Two Cents a Word, all classified. Each initial or number counted as one word. No advertisement taken for less than 25 cents each issue. All replies must be sent direct to advertisers. Cash covering the exact number of words at 2 cents each must be sent with every order.

This Department for Live Stock Only.

CATTLE.

SUNNY SLOPE HERD of Red Faced Cattle—the beef and dairy breed. Choice young stock for sale. L. H. WALKER, Reed City, Michigan.

JERSEYS—Combination and Golden Lad. For sale—10 cows, 10 heifers and 20 bulls. S. E. NIVIN, Landenberg, Pa.

FOR SALE—Eleven pure bred Holsteins Cows, from 2 to 7 years of age. Some of them have a record of 80 lbs. milk in one day, and 31 4-5 lbs. of butter in seven days. This stock will be sold at a bargain as I am going out of the business. S. F. WILLIAMS, Canton, Pa.

NEW IDEA Aolstein Bull calf for sale. Registered. Business bred. F. S. BRONG, Saylorsburg, Pa.

HOGS.

POLAND CHINA PIGS Both sexes that are beautiful and bred for quality from Early Sunshine, whose sire sold for \$900. Also service boars. We guarantee satisfaction. Write us before you buy. G. F. McCLALLAN & SONS, Groveland, Illinois.

LARGE English Yorkshires, bred by "White Side Comet". CHAS. S. SNOOKS, Utica Mills Maryland.

REGISTERED Duroc Shoats, weighing 90 lbs.—\$8.00. Pigs 12 weeks \$5. WILLIAM HARSHMAN, Utica Mills, Md.

GET SOME Improved Large Yorkshire Pigs. Hundreds are glad they have these pure breeds. Price low. Money back if not satisfied. Write now. HARRY B. BILLINGTON, Wells, Minn.

MISCELLANEOUS

SOUTH JACKSON Stock Farm—Registered Large English Yorkshires. Spring pigs and sows bred to farrow September. GALLUP & TOWNLEY, Proprietors, Jackson, Mich. Route 6.

JUMBO HOMERS for Squab breeding \$1.00 per pair. Send for free book. PROVIDENCE SQUAB CO., Providence, R. I.

POULTRY

POULTRY CATALOGUE FREE—Wyandottes, Reds, Barred Rocks, White Leghorns, Bronze Turkeys. Satisfaction guaranteed. Reasonable prices, FAIRVIEW FARM, Shrewsbury, Pa.

NELSON'S guarantee a fair hatch from their famous egg producing strains of Barred Rocks and Brown Leghorns. Write NELSON'S, Grove City, Pa. R.F.D. No. 12

100 TURKEYS, Selected stock, Mammoth—Bronze, White Holland, Buff and Narragansett. Eggs \$2 per 11, 15 varieties, poultry eggs \$1.00 per 15. S. DURIGG & SON, Armstrongs Mills, Ohio.

WHITE PLYMOUTH ROCK EGGS, at \$1.00 per setting. First class stock. H. L. NEAR, Jamestown, N. Y.

WHITE and BARRED Plymouth Rock fowls and Mammoth Bronze Turkeys. R. H. McFADEN, Oxford, Pa.

WHITE PLYMOUTH ROCKS Eggs for sale from high scoring birds and farm raised stock. Eggs \$1.00 per setting of 13 W. T. BERRY, Virginia, Ill.

than doubled his average per cow, and there is a record in Ontario where a man was getting \$34 per cow and is now getting over \$70. One of our tests was taken in Prince Edward Island, and that reminds me of an innovation they have down there; they are giving prizes for the highest production of milk per acre. Their rules are exceedingly simple. A man only requires to have five acres of land, and the milk must test a certain per cent of fat. The first prize was taken by a man who only worked 32 acres, and his production per acre was 672 pounds of milk.

The dairy business of this country has now reached \$95,000,000 per year, and it all depends on the individual cow; and just as you improve that individual record you will improve the whole business, and the cow has rightly been termed the mother of all agriculture. There is a great surprise awaiting every farmer who tests his cows. After a farmer has taken up this work for a little time he will become so thoroughly interested in it that he will want to do it most methodically and systematically.

And what is going to be the result of this work? First of all, the intense satisfaction and increased self-respect that always follows the successful outcome of any worthy public esteem. The man who has endeavor, and then there will be pride of the locality. And then there will be an increase in the amount of the monthly check received from the factory. Just as a decreased quantity of milk adds to the expense of manufacturing, so a larger quantity of milk will lessen the cost of manufacturing. So that you will see at once there is going to be a great benefit to the manufacturer, and a direct benefit to the farmer; and I think it will solve the problem of the poorly equipped factory and hasten the day when we will have no more of these unsanitary cheese factories. City merchants are interested in this matter of increased production, and it will help to keep the boys and girls on the farm. It will not be like a humdrum chore that they have to perform, but it will make a fascinating competition and a friendly rivalry, besides being a direct benefit to everyone engaged in the work. I think also that by following it out we will have a great improvement, and I believe we now see the dawn of a great prosperity for Canadian farmers.

It Is a Wonder.

Barry, Minn., Feb. 7, 1906.
Dr. J. B. Kendall Co.,

Enosburg Falls, Vt.
Enclosed find two cent stamp for which please send me your valuable horse book. I have used Kendall's Spavin Cure and it is a wonder.

Thomas E. Sheehan.

A VALUABLE FREE BOOK FOR THE DAIRYMAN.

A new 24-page book is being given away by the Sharples Separator Co., of West Chester, Pa., which takes up the subject of business dairying and the science of making cows pay. Wasted food is wasted money, as

every dairyman and farmer knows. To thoroughly understand what foods make muscle, blood and milk, and what foods produce heat and fat, is to have the secret of successful dairying. "Business Dairying" tells in a practical way what foods are best for the dairyman to feed and why. It also touches on the care of milk and cream, butter making, churning, working and packing, as well as how much milk for a pound of butter. The selling value of cream is another point taken up, and how wastes can be turned to profit. A close study of "Business Dairying" will reveal many ways to the intelligent dairyman for cutting off losses and improving every opportunity to save. Another feature of the book is "Stable Hints and Suggestions," and the value of manures.

While the practical experience of dairying is usually the best confined to the local conditions there is enough valuable information in "Business Dairying" to more than pay for the time and trouble in writing for it.

The points to be observed in judging cows will be worth many dollars in selecting dairy cattle. This is illustrated with table of points to be considered and diagram of the perfect dairy cow. Profitable dairying is in the "knowing how" and this book tells in a brief intelligent way how to reduce the cost of milk production and how to cut off the waste. A postal card addressed to the Sharples Company as above will secure you the book without cost. Be sure to mention the name of this paper when writing for "Business Dairying."

Greatest on Earth.

Hunlocks Creek, Pa., Feb. 7, '06.
Dr. J. B. Kendall Co.,

Enosburg Falls, Vt.
Dear Sirs:—I have used your medicine and found it the greatest Spavin Cure on Earth. Yours truly,
Howard Brader.

Farmers' National Congress.

The meeting of the Farmers' National Congress of Rock Island, Ill., next October, opening the 9th, will afford an opportunity for a most pleasant outing, to say nothing of the valuable program to be presented. Rock Island is beautifully situated at an attractive point on the Mississippi River at the foot of the Rock Island rapids. Aside from the fine scenery in the city and immediate vicinity, it is surrounded by an ideal agricultural country and is the site of improved dairying industries.

It seems to me that by more diversified farming better results may be obtained, inasmuch as the products of the soil will be more concentrated, and instead of hauling away tons of grain, we will be hauling away the product of the farm in the form of beef, pork, butter, eggs, etc. To be able to do this successfully, one must have obtained the proper training in this line, and must be able to conduct farming on the same business principles as a successful city business man or banker.

EYE DISEASES IN SHEEP.

(Continued from page 13)

more or less consists of minute bodies which are covered over by sharp-pointed and barbed projections, these being the natural attachments by which they unite themselves to the petals of the flowers, for the purpose of fertilization of the seed-producing organs. It should be known by all concerned that plants become productive through the action of male and female organs, and the former are the productive parts of flowers for providing the fertilizing element of the vital action of the latter. Thus there is all through nature much similarity in this natural function, and the two special organs exist all through all various races of plants and animals. But plants, from their inability to move, are forced to shed their fertilizing male element on the broad air, and accident—and the winds, especially, act as the agents of the needed fertilization of the blossoms. This, too, is an interesting fact, for no plants—except a very few—fertilize themselves; and by depending on the winds to bring them the needed supply, avoid that accident which nature abhors—viz., the self-fertilization of individuals. Nature is apparently regardless, it is true, in this respect, certainly, of the convenience of mankind, and does her business without respect to man's wishes or desires; and thus it is that in the fertilization of almost all agricultural plants, we must consider the necessities of the case, and help nature, or lose the due reward of our work. But, as we read in the severe sentence passed upon our race for its faults, all we wish for is only to be procured by hard work and the most careful attention, and all experience goes to prove that, of all men, the shepherd must possess a much larger share of all the virtues—industry, patience, foresight—and the knowledge that grows from skill and experience, or he cannot make his business fully successful. And this matter just now under consideration is one of the most important that appertains to the care of sheep.

There is some little light in the darkest night, and so there is some aid possible in this dilemma, to which the most careful shepherd is exposed. From the careful investigations made by the writer, this disease may be attributed to the effect of the pollen shed by trees and carried by the winds scores or hundreds of miles. And the product of this pollen is amazingly abundant. Millions of the minute, sharp-pointed bodies, like so many porcupines, are floating in the atmosphere from early spring to late in the summer and even the fall, and for all this time the shepherd must watch his flock very closely, not only to avoid as much as may be possible this unavoidable affliction, but care for his sheep on the instant that any attack of this kind may be apprehended.

Experience for many years and the clear understanding of the case go to suggest the following treatment: The sheep attacked should be taken up and confined in a rather dark place and kept cool, and fed lightly, as with bran mashes and cut grass. The

BLOODED STOCK

head should be wrapped in a bandage steeped in a solution of one dram of nitrate of silver and the same of carbolic acid, in a quart of cold, pure water, and ten grains of morphia added. A blister of Spanish fly (two drams and an ounce of pure lard) should be well rubbed in behind the ears. Four ounces of Epsom salts may be given in some thin gruel, and the animal must be kept where no acrid fumes, as of fermenting manure, etc., be existing. It is a matter of pure accident as to which sheep or other animal—for cattle are equally subject to this accident—may be infected, so that the shepherd's eye must be kept constantly open, and due preparations always ready, to meet the danger.—American Sheep Breeder.

A VOLUME OF ART.

In a novel and very beautiful case, "International Stock Food Farm" arrives at our desk. It says about all that can be said about the world's most famous trotting and pacing stock. It comes with the compliments of the International Stock Food Company, Minneapolis, Minn. Under such a reviewer as William T. Stead, it might get justice in a few words; but at the hands of the ordinary reviewer, it would take a great deal of space to say half what should be said about it. We feel justified in saying that "International Stock Food Farm" is the finest descriptive catalogue that ever came under our review. The charms of its beautiful marine frontispiece could only be described by a Scott. In the foreground stands out prominently the denizens of a Minnesota primeval forest, relieved by the calm waters of the Minnesota river, on which, in the dim distance, twin yachts are disembarking a host of pleasure seekers at their tree-embowered landing stages. Peering through the narrow branches of one of these trees is Dan Patch, the one-fifty-five-and-a-quarter king of the track. Beautiful as is the frontispiece of "International Stock Food Farm," its inside contents concede nothing to it, artistically or otherwise. Its first page is given to a description of the fulfillment of a dream long cherished by Mr. M. W. Savage, the proprietor of the International Stock Food Farm, when he was attending an Iowa school at the age of fifteen. Then comes a fine half-tone engraving of Mr. Savage himself, followed by a legion of the most beautiful half-tone landscape scenes imaginable. For instance, the "International" trout brook is little less than a fairy dream. When talking of cold Minnesota, it is somewhat difficult to have in mind such an enchanting scene as the "International" race track and trout brook present. Only those having seen the charming meadows in close vicinity to Lake Windemere, or the Lakes of Killarney, can have but a partial idea of the charms of the brood mare pastures on International Stock Food Farm. There is a sense of repose depicted in the "Dream of Nature," which portrays a charming trout stream rippling gayly over its sandy

bed. The Minnesota river, which is navigable, and winds its way through the farm, makes a picture that would baffle human brush to improve.

"Lights and Shadows" is a study in lights and shadows which nature paints beyond the power of brush and man-made colors. We could go on in similar strain almost indefinitely in describing the 150 and more pictures which this handsome volume contains. We are not advised as to whether this charming production is for sale or free distribution, but we should not be surprised if Mr. Savage would send a complimentary copy to those sending him a self-addressed post card stating that the writer saw this notice in Blooded Stock.

DAIRY NOTES.

It is a bad policy to put milk where it can absorb disagreeable odors. The purest atmosphere obtainable is none too good for milk and cream.

The best clover, alfalfa and other leguminous roughage should have been kept over for spring feeding. If cows ever get off their feed it is when they can smell green grass before it is large enough to give them a bite.

The dairy dog is usually not a profitable animal. He may save a few steps by hustling the cows, but there will be a great loss of milk to pay for it. Only one dog in a hundred is worth keeping. The trouble usually is with the dog's master. The dog is seldom properly trained, and generally is badly managed.

A MARK HERE means that this paper sent to you as a sample copy. We wish you to look it over and we feel that you will find it one of the best live stock papers you ever read. Below you will find our subscription offers and trust to be favored with your order.

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- No. 1. Single subscription, 25c a year.
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Successful Farming, Des Moines, Ia. This great agricultural paper has won a name in the corn development now going on in the West. How to select seed, how to plant, how to cultivate so as to increase the bushels per acre is important to every farmer. This paper and Blooded Stock both one year for 40c.

Agricultural Epitomist, Spencer, Ind. is a great monthly farm paper printed out on a big 320-acre farm, where experiments are conducted by experts and the results published in the paper. This makes it a paper of great value to the business farmers who want to keep posted on the best and latest methods. This paper and Blooded Stock both one year for 40c.

Farmers' Voice, Chicago, Ill., is one of the finest illustrated farm monthlies published. It is a regular family paper, concerning not only the farm topics but also the household, making it one of the most valuable papers printed. Every issue is worth the subscription price. This paper one year, along with Blooded Stock, for 65c.

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BLOODED STOCK




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Dr. J. H. Snoddy, of Alton, Ill., has discovered a positive cure and preventive for this terrible disease. He has had it in use for ten years and has saved millions of dollars' worth of cholera hogs for the public. The directions for its use are simple and easy to follow. Any practical farmer can stop the worst outbreaks of cholera that ever come and save every hog that is able to take the treatment.

The following breeders and well known hog raisers have tried the remedy and recommend it highly. T. T. Schouler, Supt. City Home Farm, Worcester, Mass.; J. E. Hendrickson, Commission Merchants, Philadelphia, Pa. and Dr. David Alkire, of Marco, Ind., and many others.

Dr. Snoddy has published a small booklet that gives full directions and tells all about it. This little booklet will be mailed free to every person who will write for it. Every farmer and hog raiser should write at once for one of these little booklets. They are free. Address

THE SNODDY REMEDY Co., Box 290, ALTON, ILL.

THE PREVENTION OF TRANSMISSIBLE DISEASES OF SWINE

The heavy loss from disease in hogs is largely due to transmissible diseases. The organisms that produce this class of disease usually enter the body in the feed and inspired air. Hence, muddy or dusty yards, especially if over-crowded and filthy, filthy feeding floors, troughs and hog houses are largely responsible for the prevalence of hog cholera, swine plague, etc. As young hogs are less able to resist these diseases than healthy, mature animals, the necessity of using preventive measures at this season of the year is of double importance.

During the spring and summer wallow holes are formed in the yards and pastures. In case the hogs run in a large lot or pasture during the summer, it is often considered necessary to clean and disinfect the small yards and hog houses and they become filthy and dusty. Muddy yards are especially objectionable, as they soon become filthy.

If necessary, the sanitary condition of the yard can be improved by draining them, keeping the wallow holes filled in and taking the hogs out for a few months each year. The unused lots can be cleaned and put to good use by plowing and sowing them to oats, rape, cow peas, etc.

In no place on the farm are disinfectants so necessary as in the hog houses and yards. Whitewash should be used about the house at least once during the year. Every two or three weeks the houses, feeding floors, troughs, etc., should be sprayed with a disinfectant. The tar disinfectants are the most convenient to use. These should be used in not less than two per cent water solutions. An occasional spraying or dipping of the hogs in a one per cent water solution should be practiced.

Young hogs should not be given crowded quarters. In order to keep them in a healthy, growing condition, a proper diet should be fed. Healthy individuals possess a certain amount of power to resist disease, and this plays no small part in preventing it.

The entrance of disease-producing germs from outside sources should be carefully guarded against, especially if hog cholera is present in the neighborhood. The danger of carrying the germs in the mud and filth that may stick to the shoes of a person who has walked through yards where hogs are dying of "cholera" should be recognized. Dogs, horses, cattle, stray hogs and wagons may also act as carriers of disease. The opportunity for crows, buzzards and dogs to distribute disease is not great in sections of the country where the carcasses of dead hogs are disposed of by burying. Hogs from other herds should be placed in quarantine for three weeks before allowing them to mix with the herd.

Keeping the hogs under the best sanitary conditions possible, and using the necessary precautions in preventing infection from the outside, is the most satisfactory method of avoiding loss from this class of diseases.—R. A. Craig, Veterinarian, Purdue University Experiment Station.

AMERICAN SADDLE HORSE.

The first requisite to be considered in a saddle horse is the quality of being sure-footed; the second, that of a kind disposition coupled with a good mouth; third, a courage and ambition; fourth, the conformation of a weight carrier; fifth, gaits and manners. Neither the first qualification nor the order in which it is placed will be disputed. No stumbling horse should ever be mounted. Almost every person who has seen a horse knows the meaning of a kind disposition to a certain extent, and none can possibly appreciate it more than the rider. The saddle horse should by all means have a level head and no one thing has a tendency to produce this more than a good mouth. When drawing in the reins on a start, there should be a perceptible yielding of the lower jaw, followed by a steady pressure willingly given in such a way that the rider may at all times "feel" the horse's mouth, and the absence of a desire to pull or lug should be marked. The mouth is many times the root of all evil, and the thought

of its influence upon the horse's disposition should never leave the rider's mind.—American Saddle Horse Register.

SHORT-HORN BULL CALVES

Chester White Pigs; and Eggs from pure bred White Plymouth Rock Chickens. \$1.00 per 15. JOS. T. FLEMING, Belleville, P.

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An extra lot of spring pigs that are large, growthy fellows, of the very best breeding...Our prices are right. For particulars address

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BLOODED STOCK : SEPTEMBER 1906

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Entered at the Post-Office at Oxford, Pa., as Second-Class Mail Matter, May 27, 1899.

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TIMES PUBLISHING COMPANY, Incorporated

Dr. H. L. Patterson, President.

C. E. Morrison, Secretary and Treasurer.

SOME TIME AGO we told you that we would be obliged to advance our subscription price, because the cost of paper and everything that goes toward making a paper has advanced and because we wished to give our readers a higher class paper. You will please bear in mind that hereafter Blooded Stock will be fifty cents a year, or we will accept a subscription for three years for \$1.00, and holds good for either renewal or new subscriptions after October 1st, 1906, and any person wishing to get the paper at the old rate must do so before that date.

WE ASKED our subscribers some time ago to write us letters of criticism, pointing out how we could improve Blooded Stock, and after gathering this information we are acting along the lines suggested by these writers. We are in a better position today to get out a paper suited to the wants of stockmen than ever before.

MANY VALUABLE things have already been planned for the coming months, the details of which will be taken up later and talked over. We want your advice along the line and you can greatly aid us in making Blooded Stock of greater interest by keeping in close touch with what we are doing each month and sending anything that you think comes in our line.

THE ILLUSTRATIONS will be one of the features of Blooded Stock that will attract much attention, as it is our purpose to make the illustrations a special feature. It is our desire to have breeders send us photographs of good animals—prize winners when possible. We also want good photos of farm scenes or of any interesting subject to farmers. To a great extent we have to depend upon our readers for these photos. Any that we cannot use will be returned if the request is made at time the photos are sent us. We trust that you will send these to us promptly, so that we may have them if needed.

WHEN YOU HAVE STOCK for sale don't forget that Blooded Stock reaches the class of people who are interested, and if you have what they want you get in touch with the very best class of buyers to be found. We endeavor to have the best class of advertisers use our columns and the care that we have taken to have only good practical reading matter in the columns of Blooded Stock has placed the paper in the front ranks among the farm papers, and this places it among the best class of farmers to be found in every community. We could not afford to have our readers imposed upon, but instead we use every possible means to prevent fraudulent advertisements from appearing in our columns. Our advertising rates are very reasonable and you should not miss having your adverb. in Blooded Stock when having stock for sale.

IT ALL MEANS that if we pull together Blooded Stock will from month to month grow more interesting—it will mean that our readers will take more interest in keeping up their herds, and this in the end will mean more money for all. We have never seen any man get good stock of any kind but that it made several of his neighbors dollars by improvement in some animal sooner or later. This scattering of good blood in neighborhoods has resulted in a great improvement of stock in general. Many times the farmers increase the value of their stock in this general improving without realizing the manner the improvement came. It is this building up and improving the live stock that is making the prosperous farmer that we are working for, and a great amount of good can be done if we all work together.

ONE WAY you can greatly help us in our work is to see that your neighbors get Blooded Stock. See that he subscribes so that we can get him interested in helping himself, and this in turn will lead him to help in improving some breed. Be sure that you do this for us.

DO NOT BE AFRAID to write us. Send us something for publication. Give us ideas. Send us photos. We will help you.

WE WANT STOCKMEN to write us on any subject that may be of interest to them, and we will try to give them the information they seek. Our Mr. Morrison is a practical stockman, with many years experience in the selection and breeding of pure bred stock, and will gladly tell any of the readers of Blooded Stock what he thinks would be advisable on any line of breeding and subjects of this nature.

THE VETERINARY DEPARTMENT of Blooded Stock is in charge of Dr. Smead, one of the best known veterinarians to the readers of the farm papers in the country, and any questions of this nature will receive careful attention. Persons writing under this head will be careful to note the rules of this Department given on another page.

WE DO NOT make a practice of purchasing stock for our readers, as many think. It would be impossible for us to fill such a position, as it would take all our time. However, many times we do know where persons can secure animals of superior merit, and in these cases we are glad to help any one who writes us. In the same way we are able to make sales for many of our friends by having this knowledge, and it is always to the interest of those having stock to keep in close touch with us as to what they have. This is especially true with our advertisers. We are glad to hear from them at all times.

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NOTED FOR—

The Highest Natural Colored Dairy Products
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The Most Economical Producers of Cream and Butter
The Winner of The Pan-American Dairy Breed Test
The Choice for the Private Dairy
The old-time Yellow and White Cow, "the Farmers' Cow"

HARDY CHANNEL ISLAND COW NOTED FOR BUTTER.

THE merits of the Guernsey cow are fast becoming known. Throughout the entire country attention New Jersey and Pennsylvania among the producers of high grade milk for the Philadelphia market, and also through Wisconsin among the enterprising farmers of that state it will be found that the Guernsey and the Guernsey grade cows are the preferred ones for dairy work.

The attention given them in New England is increasing each year. Already there are several high grades of cream upon the Boston market coming from Guernsey herds. Several prominent dairies in New England are catering to the Guernsey and her grades.

The points of superiority of the breed and what has won for them the favor of the dairymen is their ability to produce a milk, cream and butter of the highest natural color and with the least expenditure of food. This the Guernsey has not only proven in public trials, as at Chicago in 1893, and at Buffalo in 1901, and at many Experiment Stations; but the work which the Advanced Register for Guernseys has done for the last three years has clearly brought forward their good qualities. There have been over 400 carefully made year-records under the auspices of the American Guernsey Cattle Club, whose headquarters are at Peterboro, N. H.

In making these records this club requires the co-operation of the Experiment Station. A representative from the station visits and tests each animal under record once a month for the entire year.

There are in the list of records printed more than a score giving 10,000, 12,000 and even 14,000 lbs. of milk in a year. This register does not publish the butter records but the butter fat record of the animal. These can be converted into butter records by adding one-sixth.

Recently a cow has completed her year's record giving 14,920 lbs. of milk which contained 857 lbs. butter-fat, adding one-sixth to the butter-fat as the allowance for water and salt in the butter, you have 1,000 lbs. of butter. Among the other records we find that every mature cow has exceeded 360 lbs. fat or an equivalent of 420 lbs. of butter.

With such evidence of their capability it is not to be wondered that the breed is fast gaining friends. Wherever tried the rich natural color and fine flavor of their products are appreciated.

The breed originated from an admixture of the blood of the Normandy and Brittany cattle. They were developed on the Island of Guernsey, one of the Channel Islands. Ever since the beginning of the 18th century the sturdy islanders have sought to produce a fine dairy cow. In earlier times they were referred to as the "Farmer's Yellow Cow." They were sought for to enrich and color the product of the English dairies. Soon they were introduced to this country and their merits

were immediately recognized and they became a favorite for the private dairy, and for the fancy milk and cream trade. The demand for them for this work has steadily increased until today it seems greater than there are animals to supply it.

The American Guernsey Cattle Club was the first to adopt as their standard of excellence a scale of points based upon true dairy merit. In this scale but little attention was given to breed characteristics; just enough of same to secure uniformity. Great stress was laid upon the constitution and capacity of the animal and upon udder formation. Coupled with these the standard requires the highest degree of yellow hide. This is an indication of the great characteristic of the breed, the ability to give the highest natural color to her dairy products.

The essential points to be considered in the selection of Guernseys may be summed up in this manner: Choose first of all a good dairy type, deep body, large heart girth, firm abdominal wall, indicative of good constitution. Then look for a square-shaped udder well forward and up behind, giving great length of attachment to the body and good, squarely placed teats. Then seek a rich yellow colored hide which is easily seen at the base of the horns, inside of ears, tip of tail as well as over the body generally; and finally, for sake of uniformity, choose a fawn color with white markings on limbs and under part of body, amber hoofs and horns and cream-colored nose. These features attained, represent an ideal Guernsey. Not only an ideal Guernsey, but also an ideal dairy animal.

The influence of a Guernsey bull in grading up a dairy herd is one of the great features of the breed. Wherever tried we find a large, open-built, good class of dairy animals. This is especially observed throughout Wisconsin and around Philadelphia and some portions of New York state and New England. Gentle disposition, great constitution, great capacity, yellowest milk of any breed of cattle; good teats, rich milk, very economical producers of milk and butter-fat. These are strong points of the Guernsey.

Give to the lordly steed his equine grace;
Give to the farmer large reward for toil;
Give to the milkman honor due his place;
For him the Guernsey's mistress of the soil.
—By William H. Caldwell, Secretary American Guernsey Cattle Club, in the Farmers' Voice, Chicago.

Gentle disposition, great constitution, great capacity, yellowest milk of any grade of cattle. Good teats, rich milk, very economical producers of milk and butter-fat. These are the very strong points for the Guernsey.



A Typical Guernsey—the Great Butter Cow.

THE PRESENT DEMAND FOR GUERNSEYS

BY CHARLES L. HILL, ROSENDALE, WISCONSIN.

SOME four years ago, when the demand for Guernseys began to increase so rapidly, people who were not close students of the situation said that the record made by the five Guernsey cows at the Pan-American Exposition was the cause of it, but as the Guernseys were not represented at St. Louis and other breeds made records there equally as good as did Mary Marshall and her companions at Buffalo, we will need to look farther for the cause for the present demand for Guernseys.

While from the very first introduction of the breed there has been a growing interest in it, it has been growing more rapidly than ever in the past few years, and two of the reasons I think are the increased use of bottled milk, and the fine record the breed is making in the official tests for the Advanced Registry.

Public tests and exhibitions have established the fact the Guernsey milk is of higher color than that from any other breed of cattle, and wherever any man has started in to sell Guernsey milk and cream in a town already supplied with milk, he has in a very short time been unable to supply the demand for his goods.

Public tests have also shown that the flavor of Guernsey milk is the best of any breed.

Though I often hear men who bought large quantities of milk in cities say that this was so, it seemed impossible that the breed could have anything to do with flavor, but the testimony is so universally on one side, that there must be something in it.

The rules of the Advanced Registry tests were adopted in May, 1901, and cows were immediately started. Up to June 25th, 1906, 423 cows had qualified for the A. R., and by the time the tests have been under way five years it is expected that 500 cows will have proven their ability to publicly make the records required for such registry, which is 250.5 lbs. of fat in a year for a heifer two years old at starting and the requirement gradually increasing till a cow five years old must make 360 lbs. of fat to qualify.

While the aim is and should be to get as many cows to qualify as possible rather than to make large records, still the following list showing the largest records by ages demonstrate that no breed can as yet show official records proving themselves as large producers as the Guernsey, and cows are now under test that promise to raise the records for Classes A, B, D, and F, and so the good work goes on.

This list now contains the largest yearly records of any breed made under regular and careful public supervision and test each month. These are arranged as to age at beginning of record.

	milk.	butter-fat
Class A. (Mature cow). Yeksa Sunbeam 15439, Adv. R. 331,.....	14920.80	857.15
Class B. (4½ to 5 yrs. old). Standard's Morning Glory 12801, Adv. R. 358, R. E. 12917.00	714.01	
Class C. (4 to 4½ yrs. old). Yeksa Lind 14275, Adv. R. 377,.....	11930.90	650.56
Class D. (3½ to 4 yrs. old). Vestella of Belle Vernon 12500, Adv. R. 139,.....	10064.30	550.21
Class E. (3 to 3½ yrs. old). Dolly Bloom 12770, Adv. R. 40, Re-entry,.....	12674.83	623.94
Class F. (2½ to 3 yrs. old). Sister Sue of Mossiel 17480, Adv. R. 270,.....	10622.26	582.37
Class G. (2 to 2½ yrs. old). Imp. Itchen Daisy 3d 15630, Adv. R. 100,.....	9958.70	533.83
Best milk record, Yeksa Sunbeam 15439, Adv. R. 331, 14920.80 lbs.		

Those made before Advanced Register was started, yet with the public supervision of an Agricultural Experiment Station:

	milk.	butter-fat.
Lily Ella 7240,.....	12282.68	782.16
Lilyta 7241,.....	12812.73	710.53
Gypsy of Racine 9639,.....	11247.50	611.40

The demand for the Guernsey was never so good as now, and there's every reason to believe that it will continue to grow rather than decrease.

GUERNSEYS WINNING IN MICHIGAN

BY WILL W. FISHER, WATERVLIET, BERRIEN CO., MICH.

THIRTY years ago, through the evolutions of fate, I started out to jostle among the peoples of this world for my daily bread. My Guardian Angel led me onto a farm, since which time farming has furnished my means of support. I was then twelve years old and the man for whom I worked turned me to breaking heifers to milk, and from then till now I have cared for cows and always helped milk. In the former days we had the dual purpose Durham as the leader among the then very limited number of breeds. One of the conditions causing the great popularity of the dual purpose cow at that time here in Michigan was the value of the males to be broken as steers when two or three years old and used for clearing and breaking land and for lumbering. The Durham met this want better than any other breed.

Throughout Southern Michigan the ox team has gone with the passing of time and the dual purpose cow is giving place to the breeds that are either exclusively for beef or dairy purposes. Among the dairy breeds the Guernsey occupies first place in my heart. The five-pointed star, indicative of the five points of superior merit of the Guernsey as a dairy breed, was a well-chosen emblem, but experiments and tests have, in the last few years, added new points to this star of excellence, until today no other breed is in greater demand and none attracts more attention than the Guernsey. Give me the Guernseys for a good milking strain. You can sell the cows for a good round price, but don't do it, keep them for milking, even if the other fellow is willing to give a good round price. Since the establishment of a creamery in our village, no herd has had a higher test in butter-fat than my herd of registered Guernseys and no herd has averaged so much per single cow as have my Guernseys. Always ready to eat, gentle, richly colored milk of excellent flavor and plenty of it; a beauty from horn to hoof—give me the Guernsey cow, first, last and all the time, for she will lead the dairy interests of the United States in a few more years.



Owned by Will W. Fisher, Watervliet, Mich.

Get your advertisement in early and let the people know what you have to sell. This is the only ring there is about selling what you have.

THE AMERICAN GUERNSEY CATTLE CLUB.

THE TWENTY-SEVENTH annual meeting of this club was held on the 16th of May, at the Fifth Avenue Hotel in New York City. The work of the meeting was confined mainly to a consideration of the report of Secretary Caldwell, which was in many respects a model in its comprehensive relation of the growth of the Guernsey interest in the past year and the provision that must be made for future needs. Mr. James M. Codman, of Brookline, Mass., was re-elected president, and Wm. H. Caldwell, of Peterboro, N. H., secretary and treasurer, Mr. E. T. Gill, of Haddonfield, N. J., and A. J. Cassatt, of Philadelphia, Pa., were elected vice-presidents. Ezra Michener, of Pennsylvania, and S. M. Shoemaker, of Maryland, were elected members of the executive committee. There has been a great increase in the business of the club the past year, as will be seen from the following summary:

Number of animals entered for registration 2670, of which 911 were bulls and 1759 cows, an increase over last year of 554. The transfers number 2360, an increase of 348. Eight thousand and sixty-eight dollars and twenty cents has been received in office fees; expense \$5468.93. The Advanced Registry work was discussed at considerable length.

The splendid performance of Guernsey cows in that list have shown to the country that the breed was very superior as dairy cattle.

During the year 129 cows and 14 bulls were qualified for advanced registry. The expense of supervision was \$3,023, showing a loss over receipts of over \$117, which with office expense in this work of \$1000, left the club in debt for the work \$1,117. This rather uncomfortable fact caused considerable discussion. Several of the members contended that every breeder who had his cows placed in the Advanced Registry should pay the whole expense of such testing. This view of the matter finally prevailed and it was thus provided by resolution. Hereafter, the breeder will pay all expense for the official of the experiment stations and \$5 when the animal is entered and \$5 more when the certificate of advanced registration is sent. The club retains full supervision of the test and settles with the experiment stations. A resolution was adopted endorsing heartily the Cow Testing Association work which the Dairy Division of the United States Department of Agriculture is putting forth. The following new members have been received the past year:

J. A. Beidler, Willoughby, O.; W. J. Oathout, Binghamton, N. Y.; Clarence H. Mackay, Roslyn, L. I., N. Y.; E. C. Converse, Greenwich, Conn.; T. William Roberts, Bala,

Pa.; Isaac W. Roberts, Bala, Pa.; Jas McK. Merryman, Cockeysville, Md.; Jno. Herron, Pittsburg, Pa.; F. E. Patterson, Greenville, Del.; Mrs. Esther W. Strawbridge, Moorestown, N. J.; Geo. W. Ott, Doylestown, Pa.; E. W. Oglebay, Elm Grove, W. Va.; A. A. Housman, New York; John E. Marble, Los Angeles, Cal.; G. M. Carpenter, Wilkesbarre, Pa.

Importations from the Island of Guernsey have been as follows:

"Westmoreland Davis, 15; George B. Robbins, 19; H. McK. Twombly, 2; A. A. Houseman, 29; E. W. Oglebay, 13; Stafford County Farm, 1; Granger Farwell, 5; Edward T. Price, 57; Geo. B. Robbins, 25; E. C. Converse, 3.

The changes in the constitution were made as follows: "All interest and privileges of a member in the club and its property shall cease with his or her death, resignation, or expulsion, save that privileges of membership shall be continued to his or her estate during its settlement.

The executive committee is authorized, in case of urgency, to negotiate a temporary loan in anticipation of receipts to sustain the club in good financial standing.

A person expelled from the club shall be barred from any further use of the Herd Book.

If the executive committee finds that animals have been admitted to entry or transfer through misrepresentation, it shall have power to declare such entries or transfers void, together with any entries or transfers that may have been made of descendants of such animals, and shall direct the secretary to refuse for record any subsequent entry or transfer dependent upon the signature of any person implicated in such misrepresentation or fraudulent entry or transfer.

The by-laws were amended as follows:

Every animal must be registered by its breeder or importer. The breeder is the owner of the dam at the time she was served. Should the dam be sold before the calf is dropped, the breeder of said calf must certify to the service of the dam on the application blank or transfer, which, if done, will entitle the owner of the dam at the birth of calf to register it. Should the dam be sold after the birth of calf, but before said calf has been registered, it must be registered by the owner of dam at birth of calf.

The club looks to the seller for the payment of all transfer fees.

No transfer shall be recorded unless accompanied by a sketch of the color markings of the animal offered for transfer as provided for on the back of application for transfer, except in case where entry or transfer are asked for at same time and for same animal.—Hoard's Dairyman

A SYSTEM OF GRADING CREAM AND PRICE PAID.

A SYSTEM of grading cream was adopted about two years ago at the Kansas Experiment Station, the price paid varying with the quality of the cream. This has resulted in great improvement in the cream delivered and enables the butter maker to do his part better. Bulletin No. 135, "Grading Cream," treats of this subject and can be obtained by addressing the Station as above.

We take the following from the bulletin on the flavor and odors in cream and the causes of them:

"The causes that produce undesirable flavors and odors in cream are as follows:

1. Cream produced from abnormal milk which has been drawn from diseased cows.
2. By feeding the cow mouldy or partially decayed feeds.
3. By keeping the animal in uncomfortable conditions, which cause her to become feverish or excited.
4. By milking a cow in a filthy stable, or near decomposing material.
5. By allowing cows to wade around in mud puddles or cesspools and then milking the cow without washing the udder.
6. By milking the cow with dirty hands, or by milking on the hand in order to wet the teat. Under all conditions milk the cow with a dry teat. If the teat is sore or chafed use vaseline instead of milk to moisten it.
7. By milking into filthy pails or pails that have not been scalded with hot water. In washing the milking utensils it is advisable to use hot water and some washing

powder, and finally rinse with boiling water, or steam over a steam jet.

8. By running the milk through an unclean separator. (See Bulletin No. 131, Kansas Exp. Sta.) The separator should be taken apart and washed every day. If the separator is used twice a day it is preferable to take it apart and wash it both times, but if time does not permit this, at least five gallons of warm water with some washing powder should be run through it, followed by a gallon of boiling water without the washing powder.

9. By running cream into a filthy can. Care should be taken that cream should be put into a clean milk can that has previously been scalded and cooled.

10. By not cooling the cream to a proper temperature. After cream has been separated it should be cooled to at least 60 degrees F., and lower if possible. By putting cream from two milkings together care should be taken that the cream added last is thoroughly cooled.

11. By not properly covering the cream can with some cloth in summer when driving long distances to the station.

12. By letting cream stand at stations for a long period of time.

The hand separator enables the farmer to feed his skim-milk in prime condition, sweet and fresh, and cuts down his transportation expenses. The separated cream should always be kept under the best conditions and delivered at the creamery in the same way. When all are paid the same price there is no incentive to be careful.

CARE OF THE SUCKLING COLT

THE value of horses on the general markets makes the subject of horse-raising one of especial importance. Some years ago the horseless age was being exploited, and some farmers quit breeding and sold their best young mares, so that before there will be any surplus of good horses there must be raised the mares to produce them. Those who ignored the statements that horses would not be worth raising, and kept on breeding regularly, are now reaping rich rewards for their judgment and skill. The scarcity of brood mares applies especially to the grades of the different draft breeds, and that is, I believe, the kind the most farmers should raise. There may be more money in the coacher or trotter to the man who is fitted to breed, grow and fit him, but few farmers have either the taste, the knowledge, or the opportunity to properly prepare these classes of horses for market, and I do not wish to see a farmer sell a horse for the cost of raising him and a professional man make more in a few weeks than the farmer did in six years. The draft horse will sell younger, and as soon as he is doing farm work will sell to the city buyer as readily as the fat steer sells in the stock yards. It is only necessary to have him fat, and blemishes which will make the other classes of horses practically unsaleable will only lower the price of the drafter.

The colt should be well bred—from a sound mare, and the best available stallion. As to breed, the individual choice of the owner or of the community may decide. A neighborhood that uses the fine breeds to a great extent has some advantages over one where all breeds are represented.

Where the competition is within the one breed there are probabilities that better individuals will be bred and also they will aid in selling, as buyers can more readily pick up a load of similar horses. I like the Percheron, have no quarrel with the brother farmer who patronizes the Clyde or the Shire, if they are as good ones. Having selected a breed, I would stick to it, and use the very best pure-bred stallion to be found, even if it took a day or more to do so, than to use an inferior one.

Having the mare ready to foal, I would work right up to foaling, then let her rest for ten days or two weeks. Scrupulous cleanliness must be maintained in the box stall, where the mare is expected to foal. It will pay well to be on hand at the time, but this cannot always be done. The use of some good disinfectant on the navel cord as soon as possible is a cheap insurance against trouble from absorption of poison through that source. Many men are too soon with their aid in foaling or in having the colt get up and suck. If there seems any weakness on the part of the colt, watch it carefully, and when satisfied thoroughly that help is needed, give it, but many colts receive assistance that would have gotten around from their own strength if given a little time, and would have been better for doing so. Don't allow the colt to smother in the membranes that come with it; see that its nose is clear, but otherwise let it alone for a time.

Most colts come right and get around looking for breakfast in a short time. Keep careful watch to see that the bowels and the kidneys are doing their duty, and if so, there is little probability that anything more is needed. I have spent hours watching a colt that was not entirely right, hours, too, that it seemed should be used otherwise, and did nothing to the colt. This is always time well spent. Looseness of the bowels can often be overcome by simply milking the mare, and her feed will

have a prompt effect on the colt. I am sure the same feed, less in quality, to the mare as when working her before foaling. As a foal gets older gradually increase the feed.

When the mare is put to work, for most farmers breed their work mares, let the colt have a good box stall with no place where it can get its head in a hole or crack and if there are two or more of them, so much the better, for company is enjoyed by colts as well as people. As soon as possible get the colt to eating oats. There may be, and probably are, better feeds than whole oats, but if the colt has a chance to have all the good sound clean oats that it will eat while the mare is in the field it will do fairly well. If possible, the mare should be brought to the stable in the middle of each half day, but better keep them apart a full period than allow the colt to follow the mother in the field.

As the colt gets a month or so old, especially if there be more than one, a pasture well fenced will be a model place to have them run. Keep up the grain for a year at least. No colt can have too many oats, and I do not object to too many oats, and I do not object to some corn in cold weather if given plenty of exercise. One of the most promising pair of colts I ever saw at weaning time were ruined by being fed heavily and kept tied in their stalls. Let them out every day, unless in severe storms, and even then do not allow them in the stable more than one day without some exercise. Colts will

stand lots of cold during the day, if given some comfortable place at night and plenty of feed. There is no way to develop muscle and wind, but exercise and feed is needed to keep growth going on. Oats are the best main feed but I feed some corn, and bran is an excellent feed as part of the ration.

After grass starts well, the yearling colt may be turned to pasture. So many colts have been ruined by barbed wire that it almost seems that its day has passed. Woven wire is not so costly but that pastures for colts, and horses especially, may be fenced with it. If there is a good thick mat of blue grass, or even a second crop of clover that has not been cut, the yearling and older colts may run in the winter, but should have shelter of some kind. Care should be used, however, to see that the colts do not get thin. I have seen colts that were stabled after the first winter till ready to put to work, that made fully satisfactory growth and very desirable horses. The first year is the important time, and feeding grain cannot begin too soon. When the pasture fails, good clover hay will help the colt along. Care is needed not to have it dusty or mouldy. Many may object to clover hay, but fed properly nothing except alfalfa of good quality equals for feeding young stock of any kind.

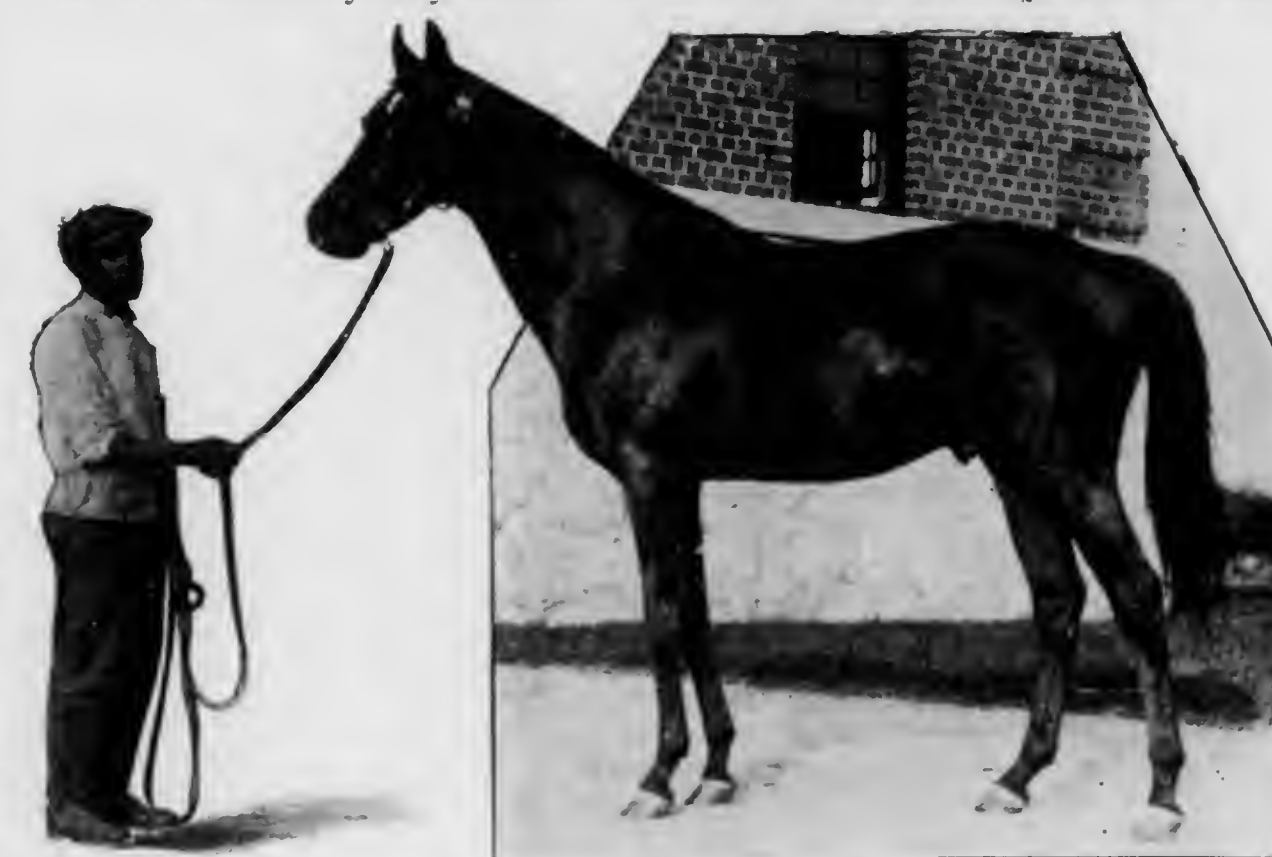
Well bred and well fed, barring accidents, the colt has always paid for raising, and at the present time most any sort of a horse is salable at a profit. It is better, though, to raise the best and raise them well, as there is both pleasure and added profit in that way.

—C. F. Hood, Battle Creek, Iowa, in Iowa State Register.

A good thriving condition is always best for showing horses.

To be too fiery is a fault in a horse drawing heavy loads on an uneven road.

Colts should be early taught to eat bran and oats and should be fed twice a day.



Owned by J. B. Haggin Lexington, Kentucky.

GOOD AND POOR COWS.

How to Weed out and Feed. The Silo in the Cow Problem.

It is true that a very large per cent of our dairy cows are absolutely unproductive, never paying their own expenses. Is it not far better to keep 15 cows, all of which are liberal producers, than to add to this number another 15 that are not self-supporting? The second 15 are kept up by the profit of the first 15, but how is the owner to be kept up? This very difficulty with which we are so heavily loaded must be removed before a dairy can be made profitable, whether North or South. But how are we going to judge which animals are profitable and which are unprofitable? By the milk sheet and a pair of milk scales. At the end of each month then we can tell exactly how much milk each cow in the herd has produced and hence how much money she has made. From this amount the expense of keeping her could be deducted and the remainder credited to her account as profit for each month.

If butter is sold instead of milk, the Babcock test should be made about the middle of the month to determine the amount of butter-fat each cow produces, and in this way we calculate the amount which she brings in each month. This is the only reliable way of judging dairy cows, and the extra work required to keep these records will pay better than any other money expended in the dairy.

In increasing our herds or in replacing those that have been culled out, the average productiveness is often kept down by our strong inclination to buy cheap cows instead of good ones. For example, a cow that will give on an average, a gallon of milk the year round will cost, we will say, \$30; one that will give one and a half gallons will cost \$60, and one that will give two gallons of milk will cost \$100. We know that the expense of keeping each of these three cows is practically the same, and for the purpose of illustrating this point we will say that it costs \$41.20 to keep each a year. We find, therefore, that if the milk tests 4.5 per cent. butter fat, the one gallon cow will produce about 16.48 pounds of butter, which at 25 cents per pound will bring \$41.20. The one-gallon cow therefore pays expenses exactly, but not one cent interest on the investment. The one and a half gallon cow, which cost \$60 to begin with, makes a profit of \$20.60 a year, while the \$100 cow, giving two gallons per day, makes a profit of \$41.20 a year. Therefore which would you prefer to do? Invest \$100 in one cow that will produce a profit of \$41.60 a year, or to invest \$90 in three cows all of which do not produce one cent of profit in a year? This is an illustration of the exact condition that exists in many of our herds today, and until we dispose of those \$30 boarders we can never make a dairy pay, no matter how we feed them.

Out of this practice arises another serious difficulty, which is

that every calf we keep from the unprofitable cow is, as a rule, unprofitable also. With the proper breeding, selection and care, any herd should improve with every generation, and if it is not improving you may rest assured that it is going back. Therefore the question of selection especially must not be overlooked, for there is no question confronting the dairyman that is of such vital importance.

Above all things keep behind your herd with the milk scales and with the milk sheets, and no dairyman should be satisfied until his herd will produce at least an average per cow of a pound of butter or two gallons of milk for every day in the year.

A good herd with limited feed and attention cannot produce maximum results. The dairy cow does not create anything. She simply transforms the food she consumes (after supplying the needs of the body) into milk, and it is impossible for her to manufacture milk other than in proportion to the food consumed. Hence a good cow should be judiciously fed all she will consume. We have learned by experience that to most nearly supply her demand and enable her to produce the maximum result, we must supply her with the muscle forming and the fat forming food in certain proportions, which we commonly term a balanced ration. I cannot here take up the details of the balanced ration, but desire to impress upon you the importance of the principles that must guide us in supplying the wants of the dairy cow. The details you can take up and work out for yourselves, if you are willing to, for there is an abundance of good literature available on this subject.

As to what we shall feed, let us bear in mind that if dairying is a success, in the north or south, the bulk of the feed must be produced on the farm. Therefore let this be our motto: Produce our feed on our own

farm, for if we try we can produce as cheap and as great variety of good feed as any section of America. Let me emphatically denounce the practice of feeding cottonseed hulls as it is now applied. I do not say that cottonseed hulls are absolutely worthless for food, for that is not true, but the fact that I wish to impress upon you is that you can produce at home on your own farm roughage that will not cost you over two dollars per ton that is many times better than cottonseed hulls, for which you pay from four to eight dollars per ton. It seems to me that we often prefer not to gather the hay that grows spontaneously in our fields, but instead will pay this enormous price for cottonseed hulls. Let me again say that until we correct such extravagant and unreasonable prices as these, and others of a similar nature, the question of feeding dairy cattle is for us absolutely settled at a dead loss, it does not matter if we live in Georgia or Wisconsin. But when we are willing to take advantage of the facilities that are at hand, we can feed a cow for less money than it will cost to feed her in Wisconsin.

As to cottonseed meal, I desire to say that it is the cheapest cattle feed on the American market, but we must use it with discretion. Unquestionably some of us are feeding too much cottonseed meal. In the first place, as it is such a concentrated feed, it is quite possible that it will produce bad results on an animal if fed in excessive quantities for a long period of time, and in the second place the animal's digestive system can utilize only a certain amount and



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ARTHUR J. COLLINS,

Box A,

Moorestown, N. J.

if more than this amount is fed it passes through the animal unused.

From the information that is available on this subject, six pounds per day may be considered as a maximum quantity for a thousand pound cow. In my practice I prefer to limit the quantity to four pounds per day. A good general method to use in feeding dairy cattle is to feed all the silage and roughage, including the best pea and vetch hay that they will eat, and adjust the grain ration to their production. No exact mixture of grain can be suggested unless the exact quality and quantity of rough feed is considered, but as a general suggestion I will say that if the cows are fed all the rough feed, consisting of pea hay and corn stover or crab grass hay or sorghum hay, they will eat, a very good grain mixture could consist of 4 pounds of cottonseed meal, 2 pounds of wheat bran and four pounds of rice flour or corn or cob meal per day. This mixture may be increased or decreased, in this proportion, to suit the production of the cow. That is, it may be increased as long as it will increase the milk flow, but when the milk flow ceases to increase, all other conditions being normal, then we are

giving all the feed the animal needs. On the other hand if we cut down the amount of grain and have no falling off in the milk supply, the indication is that we are over-feeding and we can continue to cut down, in small quantities, so long as we do not affect the flow of milk. We must not jump at conclusions too quickly after making a change in the feed for several days will be required to get the full effect of the change in the feed.

To some it may appear that this is extravagant feeding and to them let me say that if you have unproductive animals, any method of feeding is extravagant, but if you have good producers, feed judiciously all they can consume.

As to silage, in the majority of cases you cannot possibly run a dairy without a silo and make money. On the subject of silos, and I unhesitatingly recommend to every dairyman the silo as one of the cheapest means of producing the best results. Silage takes the place, in a large measure, of green stuff in winter, keeping your cattle in good hearty condition, and aside from this fact it is the cheapest roughage you can possibly have in winter.

The Improvement of Our Flocks

Nothing has impressed the writer more in travelling through Virginia than the improvement of the sheep. Ten years ago a uniformly good flock of sheep on the small farms was a rare thing. Now you find the long-legged, thin-waisted ewes of small bone and scanty fleece only occasionally. We are delighted to see this, for we believe that every man who owns a small farm can have no more profitable capital than a flock of choice ewes and a pure bred ram.

How about this as an example? A poor farmer who owns sixty acres of thin brushy land, started a few years ago with one fine ewe and twin lambs. He has always used pure-bred rams. He has a flock of sixteen ewes now, that averaged nine pounds of wool, and his lambs weighed ninety pounds. This makes his ewes yield over \$8.00 per head. On a small farm what could pay better than these sixteen ewes?

Men are learning that the best sheep pay best. I attribute the improvement of the flocks in Virginia to the growth of the early lamb industry. It became important to have lambs of good weight early in the spring, and men were not long in observing the fact that those who used pure-bred sires were topping the lamb market. Thus a widespread use of good rams came about. It was not hard to convince a man that a \$20 ram was cheaper than a \$10 ram if the former was of the right type and best breeding. Money invested in the ram was well invested, for the ram was half the flock. Now it is easy to see how the ewe lambs became better than their mothers. The improvement began and must be pushed. No one has brought his flock to the limit, and I want to encourage this fascinating and good work in Virginia. I will say posi-

tively that no man can call his year in sheep handling a success unless he has made his flock better.

There are two very simple ways of improving a flock. The first is by breeding, using always the best ram available and suitable to the needs of your flock. If your ewes are too small use a ram of good size. If they are leggy, get a ram of good strong bone and short legs. If the fleeces are thin or coarse, use a ram of dense fleece, well woolled on legs and face. It is interesting to see how soon the results of this method will show. Years ago when I was a novice at Dorset breeding, I got some ewes that sheared about three pounds of wool. Now it would be hard to find ewes in the Edgewood flock that shear less than six pounds, and many of them shear nine pounds. This resulted directly from the use of one ram, says H. B. Arbuckle in Southern Planter. It did me good to see the beautiful fleeces of the ewe lambs from this ram. This is just an illustration to show that the thing desired can be had. Sheep respond more quickly to careful breeding than any other form of livestock. I won't discuss now the value of cross-breeding. In some other paper I would like to talk over this interesting question with you.

The second way of improving the flock is by selecting or culling. I prefer to say it is the selection of the proper type of ewe lambs gotten from the rams you have chosen. Here is where good judgment comes in. You can afford to study your lambs for days. Keep your type in mind. You will feel inclined to keep the fat, plump lambs. These lambs belong to good ewes, and all other things being right, they should be selected, as they will inherit the milking qualities of their mothers. It is

important to select lambs that will make a uniform flock, so after picking out your lambs, turn them out together and turn back any that are not typical. This is the most interesting part of the year's work, and if done well, it counts.

If we would all choose better rams, and then take advantage of them, by selecting the best of their female offspring, our flocks could be made fifty per cent. better. In this day of high prices, when everybody wants sheep, there will be a tendency to stock up with any old sisters that can be bought. Remember, it will pay to buy a good ram, and start building up a respectable flock. It pays.

Alfalfa seed comes high, but alfalfa is the greatest forage crop now known. Purity of seed is of the highest importance if disappointment is to be avoided; good germination is essential to a perfect stand. The defects of alfalfa seed and how they may be detected are described in Bulletin No. 133 just issued by the Agricultural College. It may be obtained without charge by writing to the Agricultural Experiment Station, Manhattan, Kansas.

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MAX E. LANG

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Chicago, Ill.

ALFALFA GREAT FOR LIVE STOCK

All experience and observation have proven the value of alfalfa, whether for dairy cows, other cattle or hogs and sheep. Prof. Cottrell who has long been connected with the Kansas Experiment Station is a great believer in this plant. He is now president of an Elgin, Illinois, company, which prepares meal from alfalfa by cutting the dry hay and running it through the grinding mill. The following letter by him is published in the Rural New Yorker:

"The writer handled many carloads the past winter of alfalfa hay grown in western Nebraska that analyzed 16 to 17.5 per cent of protein after the losses from the baling and shipping. In the wet year of 1905 alfalfa made four cuttings at the Wisconsin Experiment Station, and the hay from the poorest cutting contained 15.9 per cent of protein, while that from the best cutting contained 21.3 per cent.

Alfalfa hay contains five times as much mineral matter as corn, and 2½ times that of oats. This mineral matter is needed to build the frames of all growing animals, and for making milk. A liberal supply is also needed for the digestive juices. A common cause for abortion is the lack of mineral matter in the feed and alfalfa is of special value to pregnant animals of all kinds in supplying protein and mineral matter needed to secure at birth young with well developed frames and bodies, and strong vitality. As showing the value of mineral matter in alfalfa the thigh bones from pigs fed grain alone at the Nebraska Experiment Station broke under a pressure of 325 pounds while the thigh bones from pigs fed alfalfa and grain required a pressure of 510 pounds to break them.

Alfalfa has the same laxative effect as June pasture. This keeps the animals healthy, their digestive organs vigorous, and prevents the feverish conditions caused by constipation; which so many feeds produce. An Elgin man who has been feeding alfalfa to 50 cows in milk last winter, said to the writer: "Every month I feed alfalfa in the winter, gives me a month in which I have practically pasture conditions. My cows show the pasture effect of alfalfa in the glossy condition of their hair and the heavy milk yield. They have never given so much milk nor looked so well in the winter." Alfalfa is not only a rich feed itself, it aids in the digestion of other feeds given with it.

The writer, while at the Kansas Experiment Station, fattened one lot of hogs on rich grain alone and another lot on alfalfa hay. For each 100 lbs. gained by the hogs fed on grain alone the hogs fed grain and alfalfa gained 173 pounds, and 868 pounds of pork were produced per ton of alfalfa hay eaten. This gain could not have come from the hay alone. The alfalfa aided the hogs to secure more nourishment from the grain. This effect of alfalfa is particularly noticed when it is fed to horses and cattle. One ton of good alfalfa contains 56 pounds of nitrogen, 10 pounds of phosphoric acid and 34 pounds of

potash, worth at the price of commercial fertilizers, \$12.46. While alfalfa furnishes such a rich crop, it increases the fertility of the surface soil in which it grows even to a greater extent than clover. The roots go down 12 to 30 feet in the sub-soil, and bring up phosphoric acid and potash, and take nitrogen from the air. One-half of a field that has been under cultivation since 1877 was seeded to alfalfa in 1898, the other half was kept in farm crops, chiefly corn. In 1905 the alfalfa was broken up and the entire field planted in corn. The corn on the alfalfa sod yielded 75 bushels per acre, and the other land 40 bushels.

The richness of alfalfa as a feed, its value for all kinds, ages and conditions of farm animals, its benefits in increasing the amount of nourishment secured from other feeds given with it and its effect in increasing the yield of crops that follow it, make it worth the while to every eastern farmer who has conditions favorable to its growth to work with it until he has learned how to grow it on his farm. The eastern farmer needs alfalfa, and he should keep trying on a small scale until he does succeed with it, no matter how discouraging the first three or four trials."

These hot summer days are especially trying on fat hogs.

Hogs must be provided with plenty of shade and an abundance of good water if they are to go through the summer in the best shape.

If hogs have the run of a wood lot where the ground is continually moist and cool, so much the better.

A thatched roof about four feet from the ground, supported by posts, provides good shade for stock and at the same time permits the air to circulate freely under the roof.

The hog is the only animal which does not sweat.

Now is the time to get in your subscription. Attend to it at once.

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That is about what happens each year for the man who owns five cows and does not use a **Tubular** cream separator. He loses in cream more than the price of a good cow. The more cows he owns the greater the loss. This is a fact on which Agricultural Colleges, Dairy Experts and the best Dairywomen all agree, and so do you if you use a **Tubular**. If not, it's high time you



did. You can't afford to lose the price of one or more cows each year—there's no reason why you should. Get a **Tubular** and get more and better cream out of the milk; save time and labor and have warm sweet skimmed milk for the calves. Don't buy some cheap rattle-trap thing called a separator; that won't do any good. You need a real skimmer that does perfect work; skins clean, thick or thin, hot or cold; runs easy; simple in construction; easily understood. That's the **Tubular**, and there is but one **Tubular**, the **Sharples Tubular**. Don't you want our little book "Business Dairymen," and our Catalog A, 300 both free? A postal will bring them.

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U S U S U S U S U

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of durability in a high-speed machine like the cream separator. No other machine a farmer uses has harder use. Run twice every day, winter and summer, it must not only do thorough work, but to be permanently profitable, it **must** be durable.

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are built for long service. A solid, low frame encloses **entirely** all the operating parts, protecting them from dirt and danger of injury. The parts are few, simple and easy to get at. Ball bearings at high speed points, combined with automatic oiling reduce wear as well as insure the easiest operation. Such careful and thorough construction is what enables the U. S. to better

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than any other separator. You don't have to buy a new one every year or two. And remember; the U. S. does the **cleanest skimming** all the time. Look into this. Write today for a copy of our handsome, new separator catalogue. Ask for number 199. It is finely illustrated and tells all about the U. S. Address

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Prompt deliveries of U. S. Separators from warehouses at Auburn, Me., Buffalo, N. Y., Toledo, O., Chicago, Ill., Los Angeles, Cal., Minneapolis, Minn., Sioux City, Ia., Kansas City, Mo., Omaha, Neb., San Francisco, Cal., Portland Ore., Sherbrooke and Montreal, Que., Hamilton, Ont., Winnipeg, Man. and Calgary, Alta.

Address all letters to Bellows Falls, Vt. 447

U S U S U S U S U



Unsound Stallions

It is no secret that the average farmer apparently sees little if any thing wrong in using an unsound mare for breeding purposes, and indeed sets apart unsound mares for breeding when they no longer can do profitable work on account of disease or disability.

To this erroneous practice it is usual to attribute much of the unsoundness of our horse stock, but the more we investigate the firmer will become the conviction that the stallions standing for public service in many districts are quite as unsound as the mares, so that it is little wonder that their progeny turns out so poorly.

When it is remembered that an adult stallion mates with up to one hundred mares in a breeding season, and is expected to beget 60 per cent of the foals, the seriousness of his unsoundness becomes apparent.

He is a factor for harm in his district and as his female progeny is kept for breeding purposes his unsoundness necessarily is perpetuated year after year whether he remains in the district or not.

Where he mates with an unsound mare the foal doubtless will be unsound for the double reason that both parents are unsound, and when he mates with a second mare his unsoundness is quite sufficient to overcome the soundness of the mare and consequently produces unsoundness or the tendency thereto in the foal.

It is much more hurtful, therefore, for the sire to be unsound than to find some unsound mares in the large number he serves and it is to be hoped that before long effective laws will be enacted in every state looking to the exclusion of hereditary unsound stallions from public service.

When such laws are enforced the effect in time will be to discourage the use of unsound mares for breeding purposes and then and not until then will the majority of the horse product come sound in wind, limb and other respects.

The writer is examining public service stallions as opportunity offers, and although comparatively few thus far have been scrutinized the results are astounding and distressing.

So unsound are some of the horses looked at that it puzzles one to understand why farmers use them and how the owner can have the "nerve" to stand them for public service.

As an example it may be stated that one grade stallion of fairly good makeup was such a pronounced "roarer" that a thacheotomy tube had been inserted in his windpipe, yet was receiving steady patronage from owners of mares.

Within a few miles of the standing place of this horse we found a little 1,300-pound alleged Morgan grade stallion used for public service although foundered in every foot, afflicted with chorea (St. Vitus' dance) and in addition having sidebones and thoro'pin. In the same district we came upon a trotting stallion so badly afflicted with chorea that he simply could not stand still and danced a sort of jig when he walked.

This horse was nineteen years old,

★ ★ ★ ★ ★

Every Farmer Knows

That The

DE LAVAL

Cream Separators

are in a class by themselves as the best separators. But many have the mistaken idea which competitors help to magnify, that they are "expensive" and that something "cheaper" will do in their stead.

The Facts are that the

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are not only the best but at the same time by far the cheapest—in proportion to the actual capacity and the actual life of the machine.

These are simple facts easily capable of proof to any buyer who will take the trouble to get at them and who need only apply to the nearest DE LAVAL agent or send for a catalogue to do so.

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★ ★ ★ ★ ★

a lanky, ungainly, leggy, wasp-waisted weed, used for driving purposes and for public service when offered the opportunity.

It is needless to cite additional examples of unsoundness.

We merely desire to draw attention to this important matter and to ask those interested in horse breeding to examine the stallions in their immediate vicinity and make a note of unsoundness such as we have referred to.

If owners of mares will thus interest themselves in closely examining public service stallions for soundness, and, if necessary, call in expert assistance in deciding matters of dispute the result will certainly be beneficial to the horse breeding industry.—A. S. Alexander, V. S., in Farm and Stock.

HIGH MILKING STANDARD IN COWS.

A Connecticut subscriber writes that he now has a herd of 40 cows, mostly Holstein grades, that average 6,000 pounds of milk, which tests 3.79

per cent. He wishes to bring the average up to 10,000 pounds per cow of milk that will test 4 per cent. He asks how he should proceed in selecting bulls to attain this end.

The ambition thus expressed is very laudable and it is to be hoped that the inquirer will attain the object of his ambition. But the standard set is very high. I question if there is a herd of 40 cows in the United States to-day which produces so high an average in milk. But in time it should be attainable, though not in a single generation of improvement. It would probably require several generations of breeding and culling out.

The sire selected should of course be a pure-bred Holstein. He should be a vigorous animal, of correct form, and should be from a dam, a producer of 10,000 lbs. of 4 per cent. milk or over. His sire should if possible be from a similar dam in the line of performance, and the more good animals in the line of performance that can be found in the upward generations of the ancestry, the better. The progeny from such a sire would have to be culled closely, and the next sire also when chosen, should be selected on similar lines.—N. E. Homestead.

PURE BRED CATTLE RAISING

There is no branch of our live stock breeding so important and so little understood as pedigree cattle breeding, the foundation of our beef cattle industry, to furnish pure-bred bulls to grade up our farm cattle to the most profitable market class. Mr. Charles Gray, secretary Gallo-way Herd Book Association, has the following practical advice to breeders in the Drovers' Journal:

During the past ten or fifteen years there have been several ups and downs in the various branches of farming. This is especially true of the branch known as pure-bred cattle raising. Although it is a fact that with few exceptions, pure-bred cattle have always left with the breeders at least the cost of production, and averaged, one year after another, a handsome profit, yet as a whole they might have been more judiciously handled.

There are many objectionable features in connection with the pure-bred cattle business which could be remedied, and would undoubtedly result in a great improvement to the cattle industry.

Poor selection, insufficient care of animals and lack of stability in breeders are some of the chief features. There is not enough stability and steadiness in evidence in the operations of the western breeder and farmer. There are too many breeders only worthy of being ranked as dealers or speculators, and too few worthy of being termed breeders for the best results to be obtained. Too many men in the business think of nothing but the almighty dollar.

There is no doubt in days gone by, the uneducated farmer prospered; however, such was rather the exception than the rule. At present farmers have plenty of talent—more than other classes suppose they have. However, there are still many farmers who do not understand the livestock branch of farming. This fact is well illustrated by the many failures which occur every year, regard-

less of good times. A theoretical and practical education are essential in the cattle business in order that the best results may be realized.

During booming times it is an every-day occurrence for men to become interested in the exorbitant prices often paid at auction sales. In a mad race to make money, men go headlong into the pure-bred business, some with limited means and most of them with only very hazy ideas of what they are doing or going to do. They seldom think of the rashness of their adventure or its outcome. They simply see other men playing a fast game and seemingly making money; thus they join the band and play for all there is in it. Before one enters into the pure-bred cattle business, he should first think of the words of Sydney Smith: 'Be what nature intended you for you will succeed; be anything else and you will be ten thousand times worse than nothing.'

The day and age in which any one could farm and raise cattle successfully and profitably is gone. To-day the farmer has just as many perplexing problems confronting him as the greatest business man in the city. Brain as well as brawn are essential requisites that cannot be dispensed with at any time. One should have enough capital so that he can buy a few good females and a bull of superior quality. The paramount thing the young beginner should look for in selecting animals are constitution, quality and as much size as possible without any tendency to coarseness.

Auction sales are held annually by the various breeders associations and leading breeds, and afford opportunities and a source of variety which cannot be found usually at private barter. The guarantees furnished by an association are certainly of the highest order, as the association always requires its members to sustain them. It is also conceded by the up-to-date breeders that there

are always many better in evidence at an auction sale for the beginner than he can secure at private purchase. The best bargains that are usually in evidence at a public sale of cattle are cows with calves at foot and safe in calf again. Such individuals are just what the beginners should select in order to build up a herd rapidly that will produce returns. Although cows past their immediate prime are sometimes offered in this manner, and they invariably can be bought at prices that warrant them more profitable investments for the novice breeder than young heifers.

If one intends to show his herd at the leading shows—and this should be every young breeder's intention—he should select from families that are fashionable and close ancestors of the up-to-date winners. Do not buy animals that are stale or have been overfitted and their usefulness impaired. After one has made the selections and is unable to take care of them himself, he should not fail to secure the services of an up-to-date herdsman—a man who is sober, industrious and steady at all times. In some instances we find that the breeders put up with inferior help rather than pay big wages. This is a mistake, for the success of every herd and breeder is largely dependent on the merits of the attendant.

In conclusion, do not get the quick-rich fever immediately after you have started your breeding operations and fall into the ranks of the speculators. Stick to the business through thick and thin.

Let every young man who engages in the cattle business in the future have more of the steadiness of his ancestors of the old world and less of the speculative spirit, so that he may be a stimulus to the cause which is striving to advance improvement in the cattle business, and eliminate sensations and curses that are constantly retarding our great American live stock industry in its progress.

GOOD BREEDING STOCK

Here in Iowa we have a Prof. Holden who rides through the State on special trains, teaching the farmers the necessity of better corn culture, especially confining himself to the securing of better stands of corn from thoroughly tested seed.

That Mr. Holden has done a world of good, there is no doubt. He has made the farmers richer by millions of dollars and without any additional expense to them. He has done this by pointing out to them where they were careless, and by giving them a scientific way of testing seed corn and only planting the seed with plenty of vitality and life.

We need a Holden in the stock business, a man that can wake up the rural population and demonstrate to them that it is much more profitable to raise a good, well bred steer that will weigh eleven to twelve hundred lbs. at three years of age and

sell at 4 to 4½ cents per pound, than it is to raise a mean brindle, spotted or scrub of some other color who will only weigh eight or nine hundred at three years of age, and has required the same amount of feed and care and will only sell at 2 to 3½ cents per pound.

This seems like putting it pretty strong, and yet any man posted in the cattle business, be he country buyer or a commission man at any of the cattle markets, will vouch for following statement, that there are more scrub cattle through the country than there are good cattle.

I am sure there is more money lost to the farmers of Iowa by raising poor stock of every kind, principally cattle and hogs, than there was by not raising a full crop of corn.

The principal products of our state are corn, cattle and hogs; our land is very fertile and high priced. Our

most prosperous farmers realize the necessity of raising the best stock of every kind; yet we have more farmers, a large per cent. of them whom are prosperous and the best of grain farmers, but they will not invest in a pure bred sire. They seem invariably to measure the cost of the pure bred by what they have to take for their scrubs, and consider them too high. These are the men that need to be waked up. They should be shown how much more money they could make out of the same amount of capital and labor.

Do not be afraid to pay from \$50 to \$100 for a good bull or \$20 to \$30 for a good boar, you will get your money back ten fold.

I would say to the editor of this paper you cannot do too much pushing in this line. There is a loss here of millions that must sooner or later be corrected.—A Subscriber.

THE NATIONAL DUROC RECORD

To the Members of the National Duroc-Jersey Record Company.

Dear Sirs: On account of the many inquiries and the demand from members of the association to know the cause of the recent change in the officers of the association, the board have thought it best and due the members of the association to make this statement of the facts and reasons for the change.

Soon after the last annual meeting in Des Moines in December, 1905, it became known to members of the board that Secretary Evans was short in his accounts, and an effort was made in February to locate the shortage. It was found at that time that a few shares of stock that had been issued about a year previous (nine in all) had never been put on the books, nor had been remitted for by the secretary; also that about fifty shares of later date had not been put on the books at that time; during the months of February and March these missing shares were remitted for in full; a little later it was found that the secretary was short on the remittance of pedigrees recorded. An

and said all pedigrees were accounted for with the exception of a few, not to exceed five hundred that he had recorded for members of the American Association free (by the order of a former board). The board authorized President Sheldon, Smith Brown and C. E. Pratt, of the executive board, to go to Peoria and make a checking up of the pedigrees recorded and compare the same with the secretary's books and locate the shortage. After being there one day and working on the books, Secretary Evans made a confession of 2,200 pedigrees, amounting to about \$1,500, that he had withheld from the books and for which he had used the proceeds, and produced an itemized list of the names and amounts of the remittances he had misappropriated, and the board now has this list in their possession. This still left a shortage of over two thousand pedigrees not accounted for, but the books were in such shape that it was impossible to locate all of them, and Mr. Evans and the board agreed on a compromise by the secretary admitting a shortage of \$2,250 and signing a statement to that effect and making a settlement on that basis. The



investigation of the books was made but they had been kept in such a shape (no dates of any receipts being given), it was thought nearly impossible to get a complete list of the shortage at that time. About June 1st, at the time of closing Volume 21, it was found from the records that there had been recorded in the last four volumes from April 1, 1905, to May 31, 1906, about 21,500 pedigrees, and the secretary's books and remittances showed that he had only reported 16,500, leaving a shortage of 5,000 pedigrees recorded in the last fourteen months and not on the books nor any remittance made for them. The entire board was called to meet in Des Moines, Ia., on June 5th. Mr. Evans presented his books and stated to the board that the books were correct and all monies received by him had been remitted to the treasurer. He denied any shortage in the accounts at that time

board has increased the bond of the new secretary from \$2,000 to \$3,000 and of the treasurer from \$3,000 to \$10,000. They have also adopted a system of checking on the secretary whereby he must in the monthly reports give the number of pedigrees recorded each month, and make a monthly settlement with the treasurer in full for all stock issued and pedigrees recorded. They also ordered that the volumes hereafter be mailed out prepaid to all members that have paid postage on Volume 17. Smith Brown and C. E. Pratt, Ex. Board.

H. C. Sheldon, Secretary, Peoria, Ill. The present officers are E. Z. Russell, president, and L. H. Roberts, treasurer.

Do not use methods which were in vogue thirty or forty years ago, or even five years ago. Be ready and up-to-date.

BUYING A SEPARATOR.

The writer, O. C. Cunningham, in the Prairie Farmer, has direct knowledge of careful tests made in Indiana on thirty farms where deep setting and dilution systems were used and on 150 farms where centrifugal separators were used. The average loss of fat in the skim milk from the gravity process was .489 of 1 per cent. The loss from the centrifugal separators averaged .049 of 1 per cent. This makes a difference in favor of the separators of .44 of 1 per cent.

A cow ought to produce at least 5000 pounds of milk in one year, and a good one, with proper care, considerably more. Counting the whole milk at 5000 pounds and allowing 15 per cent. for cream, we have left 4250 pounds of skim milk. Forty-four hundredths of 1 per cent of 4250 gives 18.7 pounds of fat per cow saved per year by using the separator instead of the deep setting system.

Allowing a reasonable price of 20 cents per pound for the butter fat we have a saving of \$3.74 per cow. If we take into account the fact that the butter fat under the old method would probably not be worth so much per pound, the saving is still greater.

For a herd of ten cows this makes a total saving of \$37.40. A machine to handle the milk of ten cows can be purchased for \$100. The interest on the investment for one year at 6 per cent. is \$6, oil and repairs about \$1, the wear on the machine \$5, making \$12 as a total. This leaves a net saving or profit of \$25.40 from the investment of \$100 in a separator.

Hoar's Dairyman adds: "The fact that the use of a separator nearly always enables the farmer to keep more cows because he is able to handle more milk will still further increase the profits. What business man would hesitate to make an investment of \$100 which would bring him a profit of \$25, besides 6 per cent. interest on his money?"

Mr. Cunningham enumerates the further advantages of the farm separator as follows: Better flavored butter; because the cream is not allowed to remain as long with whatever impurities there may be in the milk; less work to clean and care for the separator; an increase in the number of cows; greater value of the skim milk for calves and pigs.—Ex.

International Live Stock Exposition. The preliminary classification for 1906 International Exposition has gone to press and will be ready for distribution by the time this is read. They will be very glad to receive applications for the book, as there are to be many changes in the sheep and swine classes, especially for this year. Address W. E. Skinner, general manager, Union Stock Yards, Chicago, Ill.

SWINE INDUSTRY OF CANADA

In Bulletin 149, just issued by the Ontario Department of Agriculture, some valuable information is given regarding the hog production of Ontario, with special reference to the special conditions affecting production. This information was gleaned from answers to reliable correspondents in each county.

The bulletin states that out of 42 counties the Yorkshire is reported to be the principal breed in 33, and in seven divides first place with some other breed. In twenty-three counties the Tamworth tie with some other breed for position of most popular breed, in two counties second and in twenty-three counties third. In one county Chester Whites tie with some other breed for first place, and are second in one county and third in five counties. The Duroc-Jerseys and Poland-Chinas are seldom mentioned, except in Kent and Essex counties.

Yorkshires are found in the strongest numbers, comparatively, in counties west of the County of Ontario, while the Chester Whites are mostly found in counties east of the County of Durham. The Berkshires are fairly evenly divided in almost all counties. The Tamworths are mostly used in sections taking in the counties of Bruce, Grey, Simcoe, Dufferin, Peterboro, and Victoria, and counties Northumberland to Dundas. While all crosses are used, there is no doubt that the most popular cross throughout the province is a cross between the Yorkshire and the Berkshire.

Taking the province as a whole, the evident tendency is to produce more hogs of the approved bacon type. In the western part of the province there is an inclination to use more Berkshires than heretofore for the purpose of crossing, principally with the Yorkshire, although crosses with the other breeds are also noted. In the eastern part of the province the tendency in most sections is to go more to Yorkshires. In one or two counties the Chester White find considerable favor; also the Tamworths, although the general impression given by the reports is that these two breeds are both decreasing in popularity. It may be noted, however, that in the counties where the Tamworths are mostly found, there seems to be no general tendency to change; the principal breed in these counties, however, is Yorkshire, the Berkshire being slightly in excess of the Tamworths. It would also appear that while the Yorkshires are increasing in the greatest numbers throughout the province, the Berkshires are showing a higher percentage of gain.

Speaking of the quality of sires the bulletin says:

Pure bred sires are used almost entirely in twenty-five per cent. of the counties, while in about twenty-five per cent. of the counties, while in about twenty per cent. grade sires are used to a limited extent. In about thirty-five per cent. of the counties grade sires are used still more frequently, while in about twenty per cent. they are found in a great many sections, and, as some of the

correspondents state, are used in some districts of their counties altogether.

The general tendency throughout the province is slightly to increase production. In the eastern part of the province it has been customary for many farmers to depend upon breeders in their locality for their supply of young pigs for feeding; it has been noted that the demand last spring considerably exceeded the supply, the breeders who usually sell their pigs retaining them this year on account of the good prices for hogs. It is quite probable that the feeders who are short this year may be inclined to breed pigs for themselves another year, which would add considerably the production in that locality. While the tendency throughout the province is to increase as above, considerable caution is observed among many individual breeders and feeders not to go into the business too extensively, for fear that over production might bring prices down to an unprofitable point.

While the number of brood sows has increased almost generally throughout the province since 1905, the reports of most counties indicate that the delivery of hogs up to September 1st will be lighter than 1905. About 65 per cent. of the counties report lighter deliveries probable, while about 20 per cent. report no change. This apparently indicates that, taking into consideration the large reported increase of breeding sows, with the lighter deliveries before the first of September, hogs will be marketed very heavily later in the fall.

Prof. Snyder of the Minnesota Station gives us, in the following, why bacon has become so popular and desirable. In a reference to tests made he says it was cut in thin slices and baked or broiled in the oven until crisp and brown. All the fat which was cooked out was saved and eaten with the bread and other foods which made up the daily fare. On an average about 90 per cent. of the protein and 96 per cent. of the fat of the ration containing bacon were digested and about 88 per cent. of the energy was available. Calculated values for bacon alone showed over 90 per cent. protein and 0.4 to 0.6 pound digestible fat which is about two-thirds as much as is found in butter. "Lean bacon contains as much protein and about twice as much digestible fat as other meats," says Professor Snyder, "making it at the same time and even at a higher price per pound a cheaper food than other meats. Bacon fat is easily digested and when combined with other foods it appears to exert a favorable mechanical action upon digestion.

The custom practiced by many of letting swine have access to stagnant pools is a vicious one. The value of clean water for hogs can only be ap-

preciated by those who have tried both pure and impure drinking water for them. Rapid growth can be secured by giving these creatures clean drinking water, as well as clean sweet food.

Give the little fellows a chance, arrange so the pigs can be fed skim milk where they will not be disturbed by the old hogs.

Clean out the hog troughs every day if necessary. Troughs half full of litter do not make desirable places for the pigs to eat out of.

The man who thinks a dry lot with a stagnant pool of filthy water is as good as a blue grass and clover pasture, with pure drinking water, will be the first man to howl "hog cholera."

The importance of swine in the central west is not fully appreciated. It is estimated that ten of these states produce two-thirds of all the swine in the country. Corn and hogs mean prosperity.

See that your pig pens are so constructed that the pigs will get exercise and sunshine.

CHESTER WHITES AND POLAND-CHINAS.

20 choice Spring Sows, open; 25 Fall Pigs, both sexes, and also some very fine yearling bred sows that are extra fine and were prize winners last Fall. 12 head Poland-Chinas from 3 to 12 months old. I never had a better offering in young sows than this.

C. R. CRESSMAN,
Bursonville, Bucks Co., Pa.

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Box 313 - - - - - Clio, Mich

Exceptional advantages to introduce our LINCOLN SHEEP, CHESTER WHITES, SCOTCH COLLIES to readers of this paper

Write your wants immediately. Special offering Scotch Collies and Chester Whites now on hand.

Chester Whites

For years I have been selecting and breeding to build up a herd that would be uniform in shape, stamping other herds with the good qualities that I had succeeded in fixing in my herd. If in need of first-class Chesters come and see me or write your wants. Only the best sold for breeders.

T. A. STEVENSON, Shannon City, Ia.

ENON HERD CHESTER WHITES

Have some extra choice Fall pigs, both sexes. If you are looking for good ones write me. Barred Plymouth Rocks, best strains. Birds for sale. Eggs in season.

D. W. SHELLABARGER, - ENON, OHIO

Bursonville, Bucks Co., Pa. GREENWOOD STOCK FARMS

Farmers and Breeders I now have a large stock, probably the best I ever owned, thoroughbred Poland-China and Chester White Pigs, 2 to 6 mos. old, sows bred, boars ready for service, all from prize winning stock. Guernsey and Jersey Cattle. Buff and Barred Plymouth R. Chickens.

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Address C. H. DILDINE,
Route No. 1, Rohrsburg, Pa.

Inspection of the Prospective Herd Boar

A prominent Dakota swine breeder recently made this pertinent statement: "I will never buy another herd header unless I see him. I recently bought a pig from one of the most prominent and reliable eastern breeders, and described very carefully what kind of a hog I wanted. I further told him that price was no object, and did not even inquire what his prices were, but did insist that I wanted the best pig he would sell. He sent me a good pig and charged me \$50 for him. The pig is worth the money, but not to me as he is not what I want, being weak where I wanted him strong, and he is not likely to be much of a corrector in my herd. I would cheerfully have paid three or more times what I did, if he was what I wanted."

And there was no denying that the breeder was correct in his statements. We know the reputation of the seller in this case and do not believe that he intended to impose on the buyer. If he did, he would have charged more money. One of two things is true. Either his judgment as to what constitutes the ideal of the breed he is handling is faulty, or else he underestimates the knowledge and requirements of Dakota breeders, thinking perhaps that the buyer did not know what he wanted, and that something "pretty good at not a high price" was what was wanted. Prob-

orders is as good, or a little better, for a given amount of money, than what they would expect to sell at home. And especially in cases like this, where the hog was to head a pure-bred herd, and where the kind of hog wanted was carefully described, no limit set on price, and where it was stipulated that the best in the herd was none too good.

The buyer in this case is not to be commiserated with, for if the pig continues to develop he will be well worth the money—perhaps more—and there are some sows in the herd with which he can be mated and good results reasonably be expected. He says further that the lesson is worth what it cost him. This is a cheerful view to take of it, but the chances are that the disappointment is keen, nevertheless.

But there is an important lesson in this and similar transactions for all. The buying of a sire to head a pure-bred herd is perhaps the most important duty that falls on the breeder, though many treat it quite lightly. Upon the individuality and the breeding quality of the herd header depends very largely the material welfare of the breeder, and the selection of one should enlist the best there is in the breeder. While it is a wise policy never to waste a dollar, it is very unwise to scrimp on an individual that is to be half of the herd, and

upon whom may depend the breed—as numerous as is generally supposed, and when one is secured that is worthy his place, a proper valuation should be set upon him and he should be allowed to die in the herd.

From the nature of the case, there always will be more or less of the mail order business, and this to the advantage of both buyer and breeder. However, it will always be the cause of more or less dissatisfaction, because what is one man's judgment of an animal may not be another's. This is often the case, though when the buyer is as careful to describe what is wanted as was the one alluded to above and when there is no restriction in price, the chances for misunderstanding are minimized, or ought to be. When there is already a worthy sire at the head of the herd, though another is wanted and the buyer can afford to experiment, buying boar pigs by mail is not so hazardous, because the newcomer can be tried out for a year with a few sows and then be kept or discarded, as the results would indicate being the best. But when a first class sire is needed that is to go immediately to the head of a good herd, it is good policy for the breeder to pick him after personal inspection.

Buying females "unsight and unseen" is another matter, for an unworthy sow affects the herd only so far as one litter is concerned, and can thus do very little harm, if she does not do good.—Dakota Farmer.

Primrose Herd Large English Yorkshires.

From Imported Stock. Second to none. Write for prices.
A. A. BRADLEY,
Frewsburg, N. Y.

Chester Whites

I have them combining the best blood in Chester County. If you want the good old Chester that has made this county famous, we have them here that will please you. We breed and sell on y the best. Write me.

L. WEBSTER, - Kelton, Pa.

SPRING PIGS CHESTER WHITES

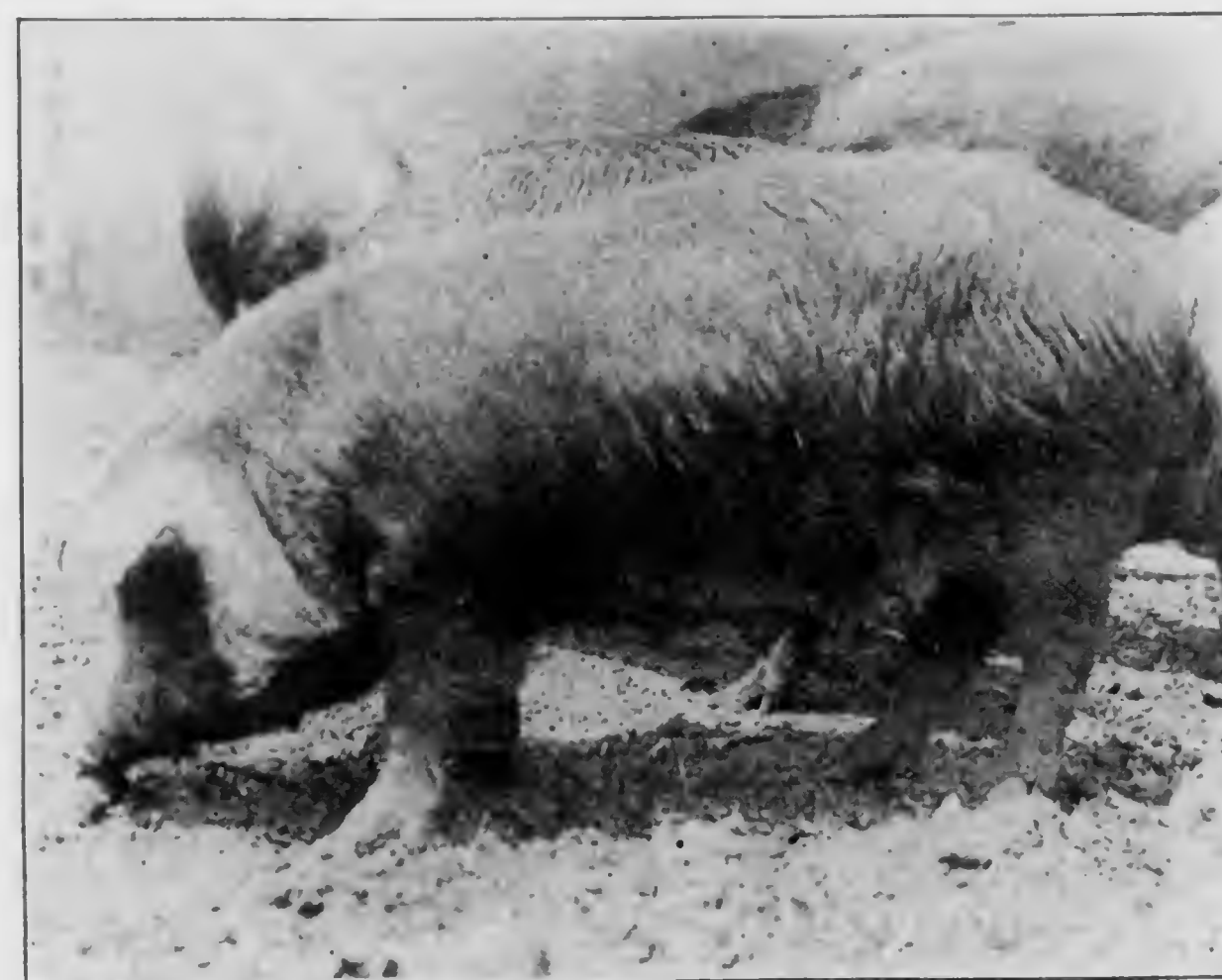
Bred right, Fed right, Priced right, Come and see them, as good as any herd in Penna. Can please you.

J. H. YARNALL, Kelton, Pa.

Bargains in Poland-Chinas, Berkshires & Chester Whites

I now have a large stock of probably the best I ever owned. Cannot tell you all here, but I have Boars and Sows, all breeds, to 6 months old, mated not akin; sows bred and boars ready for service. Guernsey Calves and Registered Scotch Collie Puppies. Write for prices and illustrations. This stock must go and will be sold. M. B. Turkey, Barred and White P. Rocks, Brown Leghorns for sale.

P. F. HAMILTON, - Cochranville, Pa.



Duroc Jersey Sows owned by J. E. Watson, Edenburg, Ind

ably the latter. In either case, he has done himself an injury that he cannot repair, and has lost one good customer, and likely many more. And right here is where many eastern breeders make a mistake. Our experience teaches us that Dakota buyers discriminate as closely as do eastern people, and further, that they are fully as competent to judge of quality. If the people to the east of us expect to build up a business here and hold it, it behooves them to take note of this fact and to see to it that what stock they send here on mail

er's future. There are many instances where one sire has made the reputation and the fortune as well of a man, and there are many more cases—though we do not hear of them—where a sire has been a positive detriment in a herd even to the extent of eventually driving the breeder out of business. In many cases those of the latter class could trace their downfall, if they would, to buying a herd header without inspection, and then hanging to him after he is received. It costs money to select a worthy herd header, for they are not

AMONG THE BREEDERS

Good Short-Horn Bull Calves of good breeding can be had of Jos. H. Fleming, Bellville, Pa.

Delaine Rams are being offered for sale by W. H. Creswell, Cedarville, O. If you need a good ram write at once.

V. C. Razor, Salt Lick, Ky., is offering Poland-Chinas sired by a son of the Champion at St. Louis. Here is a chance to get some good blood.

Large English Yorkshires can be had of the best blood and breeding by writing to Chas. S. Snook, Utica Mills, Md. Do it at once.

Wm. Harshman, Utica Mills, Md., has a number of Duroc-Jersey swine that he offers for sale at reasonable prices. See his adv.

W. C. Cruser, Montrose, Pa., is advertising Holstein Bull Calves of the best breeding to be found in the country. Also has O. I. C. Pigs. Better write him at once.

Max E. Lange is offering a large number of farms in Texas at from \$1 to \$3.50 per acre. Any person wanting a cheap home that will make him a fortune should see his advertisement in this issue and write him at once.

Cutaway Harrow, known from one end of the country to the other as the best disk harrow made, is being offered for sale. See adv. and write them for booklet. We have looked it over and every person should read it carefully for the information it contains, even if not needing a harrow.

Hunting dogs are now in demand. The hunting season is drawing near. If you want a dog, don't put it off to the last minute, or pet stock, see adv. of C. G. Lloyd, in this issue.

One Dollar Each is the figure at which White Rock Cockerels can be had from Arthur Benninger from September to October 31st. See his adv. and buy early.

Champions, J. H. Mahannah, North English, Iowa, has Prescott Boy, the highest priced Chester White ever sold, at the head of his herd. This hog was twice champion at Iowa State Fair, the greatest hog show in the country. He will be bred to such sows as won under 6 mos. The judge said they were the finest Chesters he ever had the pleasure of looking at. See his adv.

Stevens Bros., Hastings Co., are offering some choice cattle for sale in this issue. For thirty years they have been among the leading breeders of the country. In their herd are ten 2-year-olds averaging 17.6 lbs., ten 3-year-olds 22.3 lbs., and ten heifers and cows, 25.5 lbs. each in official 7-day butter test. See adv. in this issue.

Steel Fence Post last a life time and can be used with plain, barbed or woven wire fencing. Another great point is that they can be driven into the ground, making the work easily and quickly done. J. H. Downs, 235 Broadway, N. Y., has sold over 75,000 of these steel posts and is advertising them in this issue of Blooded Stock. Write him for catalogue.

W. H. Creswell, Cedarville, Ohio, writes us that he has just received a sow from P. W. Peterson, Vermillion, S. D. She is by old "Dakota Chief" and bred to Standard Sunshine. The sow is of the large type of Poland-Chinas, weighs around 350 lbs. at a year old and smooth. Am well pleased with her. My hogs are in fine condition; customers seem to be well satisfied with what I send them. If every inquirer had bought would have been sold out long ago. The majority of them came from the mountain region, from New York to North Carolina. I have answered nearly 100 letters since the 1st of November. In all I have shipped only one man complained any and that was that he thought the pig was too fat. Feel sure where I have sent my stock I will sell more in the future.

Hog Cholera.—Under this heading will be found in another column the advertisement of Dr. J. H. Snoddy Co., of Alton, Ill., advertising the Snoddy Remedy for Hog Cholera. This remedy has often been mentioned in these columns. It has been tried by a large number of eastern hog raisers, many of whom have given it their unqualified endorsement. This is evidence to us that the remedy is certainly a valuable one. This is the only Company we know of that will send a man right into the lot among the sick hogs and doctor them up and save them. We do not know of any other remedy or any other cholera cure company that makes this a practice. These people have visited sick herds throughout the U. S. and always save the hogs wherever they are called. Evidently they know they have a cure or they would not go into the worst outbreaks that ever occur throughout a dozen or more states. Read their adv. and write for their book and circular.

ANNUAL MEETING NATIONAL CHESTER WHITE RECORD ASSOCIATION.

The Annual Meeting of the National Chester White Record Association was held on the Fair Grounds, Des Moines, Iowa, August 30th, 1906. The meeting was called to order by its President, B. R. Vale. The minutes of the last meeting were read by the Secretary, and approved. The Secretary then read his report as follows:

Your Secretary has the following report to make: There have been recorded since last report, 231 males, and 444 females, making a total of 675 records entered, with 4 additional ones already recorded in other records. Of these, 158 males and 277 females were from members of the Association; the balance from those not members, 73 males and 167 females. There are recorded for Volume Eleven, 1,483 pedigrees.

Your Secretary would recommend that the Eleventh Volume be printed. There has been one share of stock sold. One full set of Volumes, one of Eighth, two of Ninth, and four of the Tenth Volumes, have been furnished to parties wanting them. There have been distributed 2,600 blank pedigree forms.

Upon motion the Secretary was instructed to proceed to have the Eleventh Volume printed. The chair then appointed W. W. Vaughn and T. H. Schuknecht, a committee to audit the Treasurer's account, which was found to be correct, there being a balance on hand of \$1,098.49.

Cures Spavin—Positive Proof.

Dr. J. B. Kendall Co., Joliet, Ill., Mar. 5, '06. Gentlemen:—Please send me a copy of your "Treatise on the Horse." I have a number of horses in my stable and have your Spavin Cure on hand at all times. I have cured one of my best horses of spavin in a very short time, which is positive proof that it does the work. I am now treating a trotting horse for spavin. The case at first seemed almost hopeless, but is coming around all right. I can not too highly praise your Spavin Cure. Yours, truly,

James Egan, 300 S. Ottawa St.

A MARK HERE means that this paper is sent to you as a sample copy. We wish you to look it over and we feel that you will find it one of the best live stock papers you ever read. Below you will find our subscription offers and trust to be favored with your order.

SUBSCRIPTION BARGAINS

- No. 1. Single subscription, 50c a year.
- No. 2. Send two new subscriptions at 50c each for one year and get your own subscription advanced one year, free.
- No. 3. Send us \$1 and have your subscription advanced 3 years.
- No. 4. Send us \$1 and have your subscription advanced two years and get your choice of recipes for Scours and Thumps or Plans for building a Hog House.

BLOODED STOCK for September, 1906.

Used 20 Years—True to Name.
Armada, Ark., Oct. 27, '05.
Dr. J. B. Kendall Co.,
Gentlemen:—I have used your Spavin Cure for 20 years and have found it to be true to name. It is truly a Spavin Cure. I have cured three cases for myself, and several for others with success. I wish the world knew the worth of Kendall's Spavin Cure. It is the horse's and horseman's friend and a deadly foe to spavins.
Yours very truly,
W. H. Smith.

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent or exchange, poultry, poultry supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants, and vegetables. The cost of advertising is

Only Two Cents a Word, all classified. Each initial or number counted as one word. No advertisement taken for less than 25 cents each issue. All replies must be sent direct to advertisers. Cash covering the exact number of words at 2 cents each must be sent with every order.

This Department for Live Stock Only.

CATTLE.

CORNUCOPIA and SARCASTIC LAD Blood. Pure bred Holstein bull calves, sired by Sarcastic Cornucopia Johanna Lad 38550. Here you have the two most fashionable strains. Every breeder wants them. Circular. Also O. I. C. Pigs. W. CRUSER, Montrose, Pa.

NEW IDEA Holstein Bull Calf for s.e. Registered. Business Bred. F. S. BRONG, Saylorsburg, Pa.

SUNNY SLOPE HERD of Red Polled Cattle—the beef and dairy breed. Choice young stock for sale. L. H. WALKER, Reed City, Michigan.

JERSEYS—Combination and Golden Lad For sale—10 cows, 10 heifers and 20 bulls. S. E. NIVIN, Landenberg, Pa.

FOR SALE—Eleven pure bred Holsteins Cows, from 2 to 7 years of age. Some of them have a record of 80 lbs. milk in one day, and 31 4-5 lbs. of butter in seven days. This stock will be sold at a bargain as I am going out of the business. S. F. WILLIAMS, Canton, Pa.

HOGS.

REGISTERED DUROCS—Pairs and trios not akin. Stock of all ages for sale. WM. HARSHMAN, Utica Mills, Md.

POLAND-CHINA PIGS, sired by Kentucky Meddler, he by Meddler, the great World's Champion at St. Louis. Price \$10. V. C. RAZOR, Salt Lick, Ky.

GET SOME Improved Large Yorkshire Pigs. Hundreds are glad they have these pure breeds. Price low. Money back if not satisfied. Write now. HARRY B. BILLINGTON, Wells, Minn.

MISCELLANEOUS

SPORTING and Pet Dogs, Cattle, Sheep, Swine, Pigeons, Ferrets and Rabbits. Ten cents fifty-six page illustrated catalogue. C. G. LLOYDT, Dept. 2B, SAYRE, PA.

JUMBO HOMERS for Squab Breeding \$1.00 per pair. Send for free book. PROVIDENCE SQUAB CO., Providence, R. I.

POULTRY

WHITE and BARRED Plymouth Rock fowls and Mammoth Bronze Turkeys. R. H. McFADEN, Oxford, Pa.

CHOICE WHITE ROCK Cockerels, (Fisher strain), \$1.00 each during September and October. ARTHUR BENNINGER, Berlinville, Pa.

BLOODED STOCK for September, 1906.

THE HEAVY HORSE BUSINESS

Knowing several importers of stallions well, and a great number of them slightly, I think it would not be amiss to tell a few things that I know by experience and some facts that can be substantiated by the best men in the country.

The importers all make "big money," and this is as it should be, as they take big risks, and as long as they bring good stallions here they add to the wealth of our country, but the temptation to make the most money out of their business has in the last ten years caused men to import the "culls" of France, England and Scotland, and sell them at enormous figures. When an importer gets a first class animal he is kept at the barn until sold, and when the animal is not a first class one, he is railroaded around the country till some point is reached where a slick, smooth-tongued salesman can find a man of the same type who is willing for a price to help get up a club among his neighbors and buy these inferior horses at two to three times their actual value.

Now, the worst feature of this "faking" business is in the fact that nine-tenths of these fellows try to make the ignorant or rather unsophisticated buyer believe that a native bred stallion is inferior to the imported or foreign bred animal—ninety per cent. of these importers do not breed or own a mare and therefore handle only the foreign bred horse. Now let us look at the

facts in the case, based on actual experience, in an unbiased and unprejudiced manner, says J. F. Lewis, in the Southern Planter.

The soil, climate and general conditions for breeding and rearing horses here cannot be surpassed by England, Scotland or France. During a period of seventeen years since I bought the first Percheron stallion I ever owned, although I had bred to several owned by others; I have owned two imported Percheron mares, and three Percheron stallions (imported). One cost at the importer's barn \$2,000 cash, another at the barn of the importer, \$2,250, and another \$2,000, bought at the importer's barn, and a son of Brilliant 1271 (755), these were all good horses, but no one got a stud colt that I cared to keep or use on my pure-bred mares.

I have owned several big native bred stallions whose colts were the best I ever owned and sold at higher figures than those got by the imported horses, and now have a 2,200 pound stallion bred in the U. S., whose colts are far superior to any I ever saw, taking the general run of mares served by him. These native bred horses are acclimated and naturally get a larger per cent. of colts. I have raised better mares than either of the imported mares that I once owned and my horses are improving every year and can find enough home bred stallions to suit me, or anyone else that knows a draft horse when he sees one.

RIGHT KIND OF COWS

Many breeders of dairy cattle have not fully grasped the height and the depth and breadth of their profession. There are too many who think it is simply the reproduction of pedigreed livestock. It is more than that. It is the bringing together in one animal the capable milk producer and the mother annually of a strong vigorous calf. Mr. Scribner, a very successful breeder, says: "In my estimation a profitable cow is one that can produce year after year a maximum yield of butter at a cost that represents a good profit to the owner. She must also produce one healthy calf each year. This ought to be one of the requisites of the sire which is to head the herd. See to it that he is from a productive

strain of regular breeders. He will intensify his weak points as well as reproduce his good qualities in breeding. He ought to be as nearly perfect in dairy conformation and dairy makeup as possible. With all the care we may exercise in the mating of our animals some faulty ones are sure to develop. We must figure on that. If we have looked well to this end, to see that the sire is right, and that the dams we are to use for foundation are right, we have gone a long way toward developing the profitable cow."

LATE FALL PIGS.

Every hog raiser that has tried to raise fall pigs knows some of the difficulties which must be overcome if he makes it a success. With plenty of skim milk and a variety of food and warm hog houses the pigs may be made to grow reasonably well but at a greater cost than if they had come earlier in the fall. One prominent hog raiser and writer recommended killing all pigs as soon as they come that are farrowed later than September 30, and breeding the sows for early spring. This may be the best plan but it looks as if the sows should be kept from having to grow a litter of pigs and then as

soon as they are farrowed killing them. Would it not be better to keep the sows from being bred for late pigs rather than having a lot of pigs to be destroyed. It would be better to let the spring litters run with their mothers during the summer and let the sows wean them when she wants to rather than to wean them and to allow the sow to be bred for late fall pigs. The spring pigs would grow faster with less attention and the sow would not likely come in heat so as to be troublesome while the pigs were sucking.—A. J. Legg.

RELIEF IS SURE.

Spavin, Ringbone, Curb, Splint, all Lameness and Bony Enlargements cured quickly and permanently with

Kendall's Spavin Cure.

Spavin Cure a Wonder. Holdness, N. E., July 28, '06. DR. J. B. KENDALL CO.,
Gentlemen:—Enclosed find a two cent stamp for which please send me your valuable horse book. I have used KENDALL'S SPAVIN CURE and it is a wonder. CHAS. A. HAZELL.
Price \$1.00 per bottle. Greatest known remedy for family use. All druggists. Accept no substitute. The great book, "Treatise on the Horse" free from druggists or Dr. J. B. KENDALL CO., Enosburg Falls, Vt.

No More Blind Horses For Specific Ophthalmia, Moon Blindness and others Sore Eyes, BARRY CO., Iowa City, Iowa, have a cure.

COTOCTIN STOCK FARM
Large English Yorkshire
Sired by "White Side Comet, No. 4726," son of "S. H. Coiston Eclipse 1" winner of first in his class, a'so champion and Grand Champion, over all ages, at St. Louis Fair, 1904. Pigs of either sex and sows bred for sale at reasonable prices.
CHAS. S. SNOOK, Utica Mills, Md.

CHAMPIONS
CHESTER WHITES
PRESOTT BOY Twice winner at the Iowa State Fair: will have fine sows bred to him for sale. Some extra choice stock. Write
J. H. MAHANNAH,
North English, - - - - Iowa.

FOR SALE—SHORT-HORN BULL CALVES
Chester White Pigs of Various ages
One extra fine Boar that should please anyone.
JOS. T. FLEMING, Belleville, Pa.

FOR THIRTY YEARS
BROOKSIDE HERD has been producing and developing the kind of Holsteins that have helped to make the breed famous for milk and butter production. Commencing with only a pair—as good as could be bought, this herd now numbers 350 head, and for years has carried off the honors in the official competition butter tests of the H. F. Association. A good Herd to buy from.
THE STEVENS BROS.
Brookside Herd, Lacona, N. Y.
Hastings County. Farm near Lacona and Liverpool (near Syracuse)

Best in Years Poland Chinas
Ohio Sunshine 2nd, yearling boar. Good one March and April sows sired by O. S. 2nd, Standard Sunshine and Correction. March gilts by O. S. 2nd. Also bred sows later.
Registered Rams, large, smooth, heavy shearing. Write for prices, description and breeding to
W. H. CRESWELL
CEDARVILLE, O.

Horse Owners! Use

GOMBAULT'S

Caustic

Balsam

A Safe, Speedy, and Positive Cure

The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
THE LAWRENCE-WILLIAMS CO., Cleveland, O.

SALE DATES

Poland-Chinas.

- Sept. 22—Dr. H. Pritchard, Wisner, Neb.
 Sept. 27—Ed. Holmes, Bedford, Ia.
 Sept. 27—Jas. B. Turbett, Hanna City, Ill.
 Sept. 28—E. E. Leighton, New Market, Ia.
 Sept. 28—Prouty & Keeline, Council Bluffs, Ia.
 Sept. 29—Rood & Fesenmeyer, Clarinda, Ia.
 Oct. 2—C. J. Gabel, Louisa, Neb.
 Oct. 3—William Penningroth, Tipton, Iowa.
 Oct. 4—M. Bradford, Rosendale, Mo.
 Oct. 5—Bergen Bros., Stanton, Ia.
 Oct. 5—O. F. Applegate, Oakland, Ia.
 Oct. 6—D. C. Loneragan, Florence, Neb. (Sale at Council Bluffs.)
 Oct. 8—R. E. Williams, Oakland, Ia. (Shorthorns).
 Oct. 8—E. E. Axline, Oak Grove, Mo.
 Oct. 8—Wurtzel Bros., Beemer, Neb.
 Oct. 9—A. J. Johnson, Oakland, Ia.
 Oct. 9—Ira Cottingham, Eden, Ill.
 Oct. 9—O. E. Wade, Rising City, Neb.
 Oct. 10—R. A. Sanman, Glasford, Ill.
 Oct. 10—C. S. Price, Carson, Ia.
 Oct. 10—W. D. Fulton, Villisca, Ia.
 Oct. 11—J. O. James, Braddyville, Ia.
 Oct. 13—C. Q. Miller, Conway, Ia.
 Oct. 15—Fleming & Schrader, Arbor Hill, Ia.
 Oct. 15—A. J. Bunn, Kent, Ia.
 Oct. 16—J. H. Wintermute, Blocton, Ia.
 Oct. 16—Chas. E. Ogg, Auburn, Ill.
 Oct. 17—J. H. Harvey & Son, Maryville, Mo.
 Oct. 17—Williams Bros., Villisca, Ia.
 Oct. 17—Ferd Friedly, Verdon, Neb.
 Oct. 17—W. A. Pruitt, Asherville, Ks.
 Oct. 17—J. L. Ewart, Grant City, Mo.
 Oct. 18—W. A. Davidson, Simpson, Kan.
 Oct. 18—P. C. Miller, Conway, Ia.
 Oct. 19—Ed. Blauer, Mt. Ayr, Ia.
 Oct. 20—W. R. Dowling, Norcaton, Kan.
 Oct. 20—H. C. Whitlock and Wm. Keischick, Falls City, Neb.
 Oct. 23—J. M. Frazier & Sons, Fort Crook, Neb.
 Oct. 24—C. Lionberger, Humboldt, Neb.
 Oct. 24—F. L. Rood, Clearfield, Ia.
 Oct. 24—J. L. Miller & Sons, Brooklyn, Ia.
 Oct. 24—J. F. Walker, Alexandria, Neb.
 Oct. 24—F. A. Dawley, Waldo, Kan.
 Oct. 25—D. W. Bingham, Clay Center, Kan.
 Oct. 25—Jno. R. Triggs, Dawson, Neb.
 Oct. 25—D. O. Miller, Eldora, Ia.
 Oct. 27—J. C. Meese, Comstock, Neb.
 Oct. 30—J. M. Baker, Narka, Kan.
 Oct. 30—W. L. McNutt, Ord, Neb. (Sale at Grand Island, Neb.)
 Oct. 30—G. B. Lobb & Son, Clay Center, Neb.
 Oct. 30—Leon Calhoun, Potter, Kan. (Sale at Atchison, Kan.)
 Oct. 2—S. L. Moore, Cyclone, Ind.
 Oct. 2—Joshua Rothrock, Centerton, Ind.
 Oct. 4—H. A. Sexsmith, Greenfield, Ia.
 Oct. 4—J. R. Wooden, Hall, Ind.
 Oct. 4—J. W. Pyles, Seircleville, Ind.
 Oct. 5—Arch Brown & Sons, Waterloo, Neb.
 Oct. 5—F. A. Strong, Orient, Ia.
 Oct. 5—Edgar Phillips, Onward, Ind.
 Oct. 5—C. E. Kimm, Blairstown, Ia.

Duroc Jerseys.

- Oct. 5—E. E. Phillips, Onward, Ind.
 Oct. 6—Lon Varntz, Lebanon, Ind.
 Oct. 6—H. C. Pfander, Clarinda, Ia.
 Oct. 8—O. C. Unger, Forest, Ind.
 Oct. 8—E. A. Williams, Lebanon, Ind.
 Oct. 9—J. E. Smith, Victor, Ia.
 Oct. 9—Frank Campbell, Tipton, Ind.
 Oct. 9—August Vogt, Portsmouth, Ia.
 Oct. 9—J. Pearcey, Martinsville, Ind.
 Oct. 9—J. M. Bechdol, Walton, Ind.
 Oct. 10—F. H. Herring, Iowa City, Ia.
 Oct. 10—Chas. G. McGinnis, Stuart, Ia.
 Oct. 10—A. C. Bott, Kirklint, Ind.
 Oct. 10—E. M. Clark, Bunker Hill, Ind.
 Oct. 10—White & Co., Westfield, Ind.
 Oct. 11—G. D. Enyart, Onward, Ind.
 Oct. 11—Grant Harris, Orient, Ia.
 Oct. 11—F. M. Erchen, Odell, Ill.
 Oct. 11—W. A. Foster, Greenfield, Ia.
 Oct. 11—W. F. Stout, Delta, Ia.
 Oct. 12—E. McGlasson, Princeton, Ill.
 Oct. 12—E. J. Ewing, Bridgewater, Ia.
 Oct. 12—H. B. Saylor, New Market, Ind.
 Oct. 12—Smith, Miller & Hyatt, Lincoln, Ind.
 Oct. 12—Clark Tompkins, Shenandoah, Ia.
 Oct. 12—C. Moore & Son, Kellerton, Ia.
 Oct. 13—Aug. Sommeland, Harlan, Ia.
 Oct. 15—Bromenbutg Bros., Anderson, Ind.
 Oct. 15—Eikenberry & McNeil, Camden, Ind.
 Oct. 15—Eikenberry & McNeil, Flora, Ind.
 Oct. 15—A. Wilson, Bethany, Neb.
 Oct. 15—Lynch Bros., Mt. Ayr, Ia.
 Oct. 16—Taylor & Son, Kokomo, Ind.
 Oct. 16—G. V. Beamer & Son, Wabash, Ind.
 Oct. 16—John M. Morrison, College View, Neb.
 Oct. 16—Taylor & Son, Kokoma, Ind.
 Oct. 16—L. L. Overholser, Diagonal, Ia.
 Oct. 16—E. M. Castle & Son, Joy, Ill.
 Oct. 16—T. P. Teargarden, Wayne, Kas.
 Oct. 16—J. W. & Earl Taylor, Kokoma, Ind.
 Oct. 16—M. S. Moats & Son, Randolph, Neb.
 Oct. 17—J. A. Shelton, Manila, Ind.
 Oct. 17—Hoover & Athens, Markle, Ind.
 Oct. 17—W. A. Kirkpatrick, Lincoln, Neb.
 Oct. 17—Z. I. Groat, Tingley, Ia.
 Oct. 17—T. H. Isaac, Red Oak, Ia.
 Oct. 17—John Black, Randolph, Neb.
 Oct. 18—Hurlbutt & Rassmussen, Owaneco, Ill.
 Oct. 18—Jacob Somsel, Galveston, Ind.
 Oct. 18—C. A. Wright, Rosendale, Mo.
 Oct. 18—Gilbert Van Patten, Sutton, Neb.
 Oct. 18—Dewey & White, Shannon City, Ia.
 Oct. 18—Ott Utter, Connorsville, Ind.
 Oct. 18—B. R. Miller, Randolph, Neb.
 Oct. 18—J. O. Reece, Eldora, Ia.
 Oct. 19—Geo. R. Manifold, Shannon City, Ia.
 Oct. 19—Carl Scott, Muncie, Ind.
 Oct. 19—Geo. Briggs & Son, Clay Center, Neb.
 Oct. 19—W. C. Holmes, Osmond, Neb.
 Oct. 20—H. E. Watson, Edinburg, Ind.
 Oct. 20—H. G. Warren, Inland, Neb.
 Oct. 20—Fred Snyder, Galveston, Ind.
 Oct. 20—M. Mihills, Norfolk, Neb.
 Oct. 22—M. W. Greer & Son, Rushville, Ill.
 Oct. 22—C. H. Masten, Stilesville, Ind.

BLOODED STOCK for September, 1906.

- Ind.
 Oct. 22—T. F. Shetterly, Lapel, sale at Noblesville, Ind.
 Oct. 23—Perry Barker, Thorntown, Ind.
 Oct. 23—H. S. Sheller & Son, Eldora, Ia.
 Oct. 23—T. E. Laurie, Jacksonville, Ill.
 Oct. 24—Colbert & Stroud, Warren, Ind.
 Oct. 24—O. S. Gilbert, Conrad, Ia.
 Oct. 24—Geo. W. Seckman, Ripley, Ill.
 Oct. 25—Zionville Combination, Zionville, Ind.
 Oct. 25—Maulove Bros., Bowen, Ill.
 Oct. 25—L. P. Hovious, Cromwell, Ia.
 Oct. 25—Balmat & Son, Mason City, Ia.
 Oct. 25—Thomas & Hogsett, Golden, Ill.
 Oct. 26—T. C. Kennedy, Thorntown, Ind.
 Oct. 29—M. P. Cannon, New Castle, Ind.
 Oct. 26—B. C. Marts, Polk City, Ia.
 Oct. 26—Manlove Bros. & Griffiths, Bowen, Ill.
 Oct. 27—A. P. Alsins, Boone, Ia.
 Oct. 27—A. J. Stevenson, Mt. Ayr, Ia.
 Oct. 27—Cutler, Reil & Cooper, Carthage, Ill.
 Oct. 30—John Holste, Massena, Ia.
 Oct. 30—McNeil Bros., Bowen, Ill.
 Oct. 30—Higgins & Fisher, Shelbyville, Ind.
 Oct. 31—Fagan, Browning, Hess & McCabe, Ripley, Ill.
 Oct. 31—C. B. Lockhart, Matinsville, Ind.
 Oct. 31—C. W. Mathes, Bridgewater, Ia.
 Nov. 1—J. E. Swope, Frankfort, Ind.
 Nov. 1—E. D. Harris, Fontanelle, Ia.
 Nov. 1—Ed. A. Baxter, Pawnee, Ill.
 Nov. 2—J. S. Lovejoy, Falmouth, Ind.
 Nov. 2—J. S. Lovejoy, Falmouth, Ind.
 Nov. 2—Fred Kraschel, Macon, Ill.
 Nov. 3—J. Coy Rouch, Girard, Ill.
 Nov. 3—Ernst L. Humbert, Corning, Ia.
 Nov. 3—Nash & Kimmons, Pickering, Mo. (Sale at Maryville.)
 Nov. 6—Geo. M. McMurry, Maryville, Mo.
 Nov. 6—F. M. Smith, Panora, Ia.
 Nov. 7—Thos. Johnson, Columbus, O.
 Nov. 7—H. B. Ayres, Eldora, Ia.
 Nov. 8—S. S. Puckett, Yellow Springs, O.
 Nov. 8—W. A. Staples & Son, Glidden, Ia.
 Nov. 12—Geo. M. McMurry, Maryville, Mo.
 Nov. 13—T. J. Hamilton, North Bend, Neb.
 Nov. 13—C. C. Cotton, Manilla, Ind.
 Nov. 14—Wm. M. Finch, Portland, Ind.
 Nov. 14—A. A. Lindley, Westfield, Ind.
 Nov. 15—J. B. Gillette, Piercetown, Ind.
 Nov. 22—S. R. Quick & Son, Gosport, Ind.

Chester Whites.

- Sept. 26—F. F. Moore, Rochester, Ind.
 Sept. 28—John C. Weddle, Franklin, Ind.
 Oct. 9—Frank Campbell, Tipton, Ind.
 Oct. 11—W. T. Farquhar & Son, Modoc, Ind.
 Oct. 17—Brooks Bros., Kingman, Ind.
 Oct. 23—E. C. Johnson, West Lebanon, Ind.
 Nov. 2—A. J. Foland, Frankton, Ind.

BLOODED STOCK
Directory of Breeders' Associations

The following list comprises the name of every live stock breeders' association in the United States, of which we have record. The name and address of secretary will also be found in every case. If any associations of this kind are not listed, we ask that secretaries notify us at once, and also notify us at once as to any change in names and addresses. It will be the intention to keep this list up to date, and we ask for the co-operation of secretaries to that end.

- Cattle Breeders.**
 American Aberdeen-Angus Breeders' Association—Thomas McFarlane, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
 American Branch Association of the North Holland Herd Book—N. F. Sluiter, Brooklyn, N. Y., Secretary.
 American Devon Cattle Club—L. P. Sisson, Newark, O., Secretary.
 American Galloway Breeders' Association—Chas. Gray, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
 American Guernsey Cattle Club—W. H. Caldwell, Peterboro, N. H., Secretary.
 American Hereford Breeders' Association—C. R. Thomas, Stock Yards, Kansas City, Mo., Secretary.
 American Jersey Cattle Club—J. J. Hemingway, New York, Secretary.
 American Noarmandy Herd Book Association—E. G. Kramer, New York, Secretary.
 American Polled Durham Breeders' Association—Fletcher S. Hines, Indianapolis, Ind., Secretary.
 American Simmental Herd Book Association—E. G. Kramer, New York, Secretary.
 American Short-Horn Breeders' Association—John W. Groves, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
 American Sussex Breeders' Association—Overton Lea, Nashville, Tenn., Secretary.
 Ayrshire Breeders' Association—C. M. Winslow, Brandon, Vt., Secretary.
 Breeders' Association of French-Canadian Cattle of the United States—W. J. McMurphy, Binghamton, N. Y., Secretary.
 Brown Swiss Cattle Breeders' Association—N. S. Fish, Groton, Conn., Secretary.
 Dutch Belted Cattle Association of America—H. B. Richards, Easton, Pa., Secretary.
 Holstein-Friesian Association of America—L. Houghton, Brattleboro, Vt., Secretary.
 Maine State Jersey Cattle Association—N. R. Pike, Winthrop, Maine, Secretary.
 National Polled Hereford Breeders' Association—A. E. White, Chicago, Secretary, 5229 Madison ave.
 Red Polled Cattle Club of America (Incorporated)—Harley A. Martin, Gotham, Wisconsin, Secretary.
Horse Breeders.
 American Association of Importers and Breeders of Belgian Draft Horses—J. D. Connor, Jr., Wabash, Indiana, Secretary.
 American Breeders' Association of Jacks and Jennets—J. W. Jones, Columbia, Tenn., Secretary.
 American Clydesdale Association—R. B. Ogilvie, Union Stock Yards, Chicago, Secretary.
 American Hackney Horse Society—A. H. Godfrey, New York, Secretary.
 American Society of America—Geo. W. Stubblefield, Union Stock Yards, Chicago, Secretary.
 American Saddle Horse Breeders' Association—L. B. Nall, Louisville, Ky., Secretary.
 American Shetland Pony Club—Mortimer Levering, Lafayette, Indiana, Secretary.
 American Shire Horse Breeders' Association—Charles Burgess, Wenona, Ill., Secretary.
 American Stud Book (Thoroughbreds)—James E. Wheeler, N. Y., Registrar.
 American Trotting Register Co.—W. H. Knight, Chicago, Secretary.
 American Suffolk Horse Association—Alexander Galbraith, Janesville, Wis., Secretary.
 Cleveland Bay Society of America—R. P. Stericker, West Orange, N. J., Secretary.
 French Coach Horse Society of America—Duncan E. Willett, 2112 Michigan ave., Chicago, Secretary.
 Coach Horse Breeders' Association—J. Crouch, Lafayette, Ind., Secretary.

Morgan Horse Register—Joseph Battel, Middlebury, Vt., Editor.
 National French Draft Horse Association—C. E. Stubbs, Fairfield, Iowa, Secretary.
 Oldenburg Coach Horse Association of America—C. E. Stubbs, Fairfield, Iowa, Secretary.

- Sheep Breeders.**
 American Angora Goat Breeders' Association—John W. Fulton, Kansas City, Mo., Secretary.
 American Cheviot Sheep Society—F. E. Dawley, Fayetteville, N. Y., Secretary.
 American Cotswold Association—Frank W. Harding, Waukesha, Wis., Secretary.
 American Leicester Breeders' Association—A. J. Temple, Cameron, Ill., Secretary.
 American Milch Goat Record Association—W. A. Shafor, Hamilton, O., Secretary.
 American Oxford Down Association—W. A. Shafor, Hamilton, O., Secretary.
 American Rambouillet Sheep-Breeders' Association—Dwight Lincoln, Millford Center, O., Secretary.
 American Shropshire Registry Association—Mortimer Levering, Lafayette, Ind., Secretary.
 American Southdown Breeders' Association—Frank S. Springer, Springfield, Ill., Secretary.
 American Suffolk Flock Registry Association—George W. Franklin, Des Moines, Iowa, Secretary.
 American Tunis Sheep-Breeders' Association—Charles Roundtree, Crawfordville, Ind., Secretary.
 Black-Top Spanish Merino Sheep-Breeders' Publishing Association—R. P. Berry, Clokey, Pa., Secretary.
 Continental Dorset Club—Joseph E. Wing, Mechanicsburg, O., Secretary.
 Dorset Horn Breeders' Association of America—M. A. Cooper, Washington, Pa., Secretary.
 Franco-American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.
 Hampshire Down Breeders' Association of America—C. A. Tyler, Nottawa, Mich., Secretary.
 Improved Black-Top Delaine Merino Sheep-Breeders' Association—O. M. Robertson, Eaton Rapids, Mich., Secretary.
 Improved Delaine Merino Sheep-Breeders' Association—George A. Henry, Bellefontaine, O., Secretary.
 International Delaine Merino Sheep-Breeders' Association—John B. McClelland, Cannonsburg, Pa., Secretary.
 National Lincoln Sheep-Breeders' Association—Bert Smith, Charlotte, Mich., Secretary.
 National Merino Sheep Register Association—R. O. Logan, California, Mich., Secretary.
 National Shropshire Record Association—S. J. Weber, Middleville, Mich.
 New York State American Merino Sheep-Breeders' Association—J. Horatio Earl, Skaneateles, N. Y., Secretary.
 Standard American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.
 State Delaine Spanish Merino Sheep-Breeders' Association—S. M. Cleaver, West Brownsville, Pa., Secretary.
 United States Merino Sheep Registry Association—J. A. B. Walker, Mount Airy, Pa., Secretary.
 Vermont Merino Sheep-Breeders' Association—C. A. Chapman, Ferrisburg, Vt., Secretary.

Swine Breeders.

- American Berkshire Association—Frank S. Springer, Springfield, Ill., Secretary.
 American Duroc-Jersey Swine Breeders' Association—S. E. Morton, Camden, O., Secretary.
 American Essex Association—F. M. Stout, McLean, Ill., Secretary.
 American Poland-China Record Co.—W. M. McFadden, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

- American Hampshire (Thin-Rind) Swine Record Association—E. C. Stone, Armstrong, Ill., Secretary.
 American Yorkshire Club—H. G. Krum, White Bear Lake, Minn., Secretary.
 National Poland-China Record Co.—A. M. Brown, Winchester, Ind., Secretary.
 International Record Association Co.—H. A. Jones, Penn Yan, N. Y., Secretary, International for all breeds and countries.
 Cheshire Swine-Breeders' Association—R. B. Radger, Oauquaga, N. Y., Secretary.
 Improved Small Yorkshire Club of America—F. E. Stewart, Espeyville, Pa., Secretary.
 National Berkshire Record Association—E. K. Morris, Indianapolis, Ind., Secretary.
 National Chester White Record Association—Thomas Sharpless, West Chester, Pa., Secretary.
 National Duroc-Jersey Swine-Breeders' Association—Robert J. Evans, Peoria, Ill., Secretary.
 O. C. Swine Breeders' Association—C. M. Hiles, Cleveland, O., Secretary.
 Southwestern Poland-China Record Association—H. P. Wilson, Gadsden, Tenn., Secretary.
 Standard Chester White Record Association—W. H. Morris, Indianapolis, Ind., Secretary.
 Standard Poland-China Record Co.—George F. Woodworth, Maryville, Mo., Secretary.
 United States Small Yorkshire Association—D. T. Bascom, California, Mich., Secretary.
 Victoria Swine-Breeders' Association—H. Davis, Dyer, Ind., Secretary.
 American Chester White Record Association, Earnest Freigau, Dayton, Ohio, Secretary.

FINE DUROCS AT PUBLIC SALE.

John Schowalter, the enterprising and one of the best breeders of Nebraska, is going to sell at Cook, Neb., September 27, one of the finest, if not the best, bunch of fine Duroc-Jersey swine that ever went through a sale ring. This offering has great attractions; it includes Golden Banner 40497, the fine yearling boar sired by the first prize yearling at St. Louis World's Fair. He is a fine one, will make a very large hog and a good breeder; the smallest litter he ever sired was eight pigs. Banner Top, 191900, sired by Champion Tip Top Notcher 20729, is a fine large yearling sow and should go into the best herd in the land. Crimson Wonder Belle, 190996, sired by the great Crimson Wonder, is a fine yearling sow and good producer. Queen Cedarvale, 190990, sired by Golden Rule 14101, is a fine yearling sow, and bred for early fall litter. West's Diamond, 191066, sired by Noble Ring, 35041, is a good one—a yearling of best brood sow type. Miss Major R., 191044, sired by Major R., 29163, is a good yearling sow—raised ten fine pigs this spring. Red Cedar, 190994, sired by Royal Triumph, 34581, is a top yearling sow and good producer also.

There are other breeds, all of the very best blood lines, such as Improved 2d. Coles Duroc and others. All tried sows have raised large litters—10 yearling sows sired 32 live pigs. The spring pigs that go in this sale are only the tops of the Golden Banner Herd—about 45 or 50—both males and gilts. They all combine quality and size and will weigh about 200 pounds in smooth condition at 6 months old, and will make fine producers. Try to arrange early to attend this great Duroc sale—it will be an important event in south-eastern Nebraska. Don't forget the date—September 27th. Catalogues will be out about September 11. Send your name now for mailing list and you will receive one. You can send your bids by mail also and you will be treated right. For any other information write the proprietor, John Schowalter, Cook, Nebraska.

Now is the time to get in your subscription. Attend to it at once.



WANTED AT ONCE

Two good reliable men in each county of the United States to devote one to three months each year to our business

A STRAIGHT BUSINESS PROPOSITION

The only one of its kind in existence. We register all kinds of animals

Lowest Fees

Best Service

Car fare and expenses will be allowed the right parties coming here to investigate our business and receive instructions when satisfactory arrangements have been made.

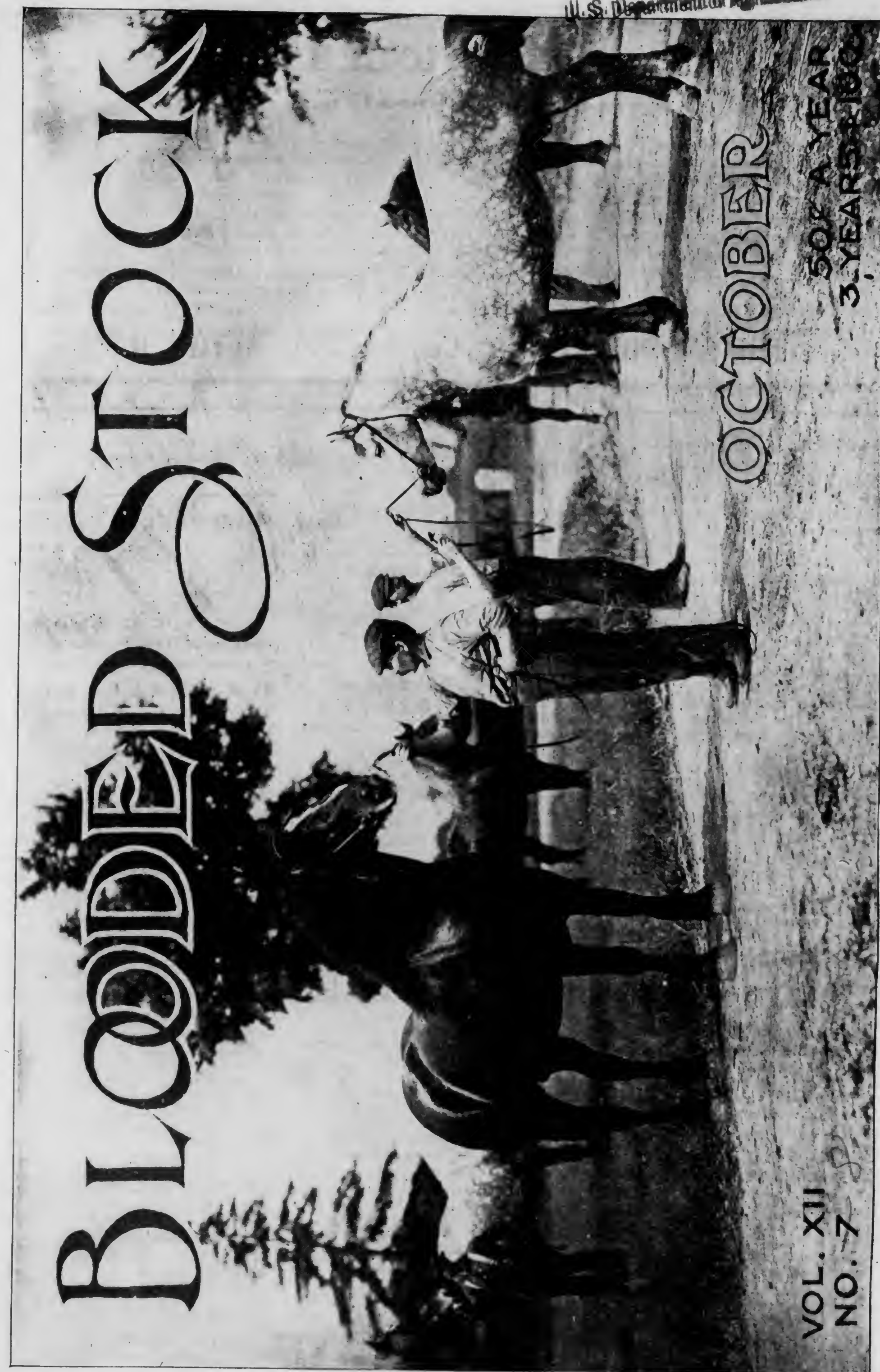
Write us fully stating your present occupation and experience with live stock.

ADDRESS

International Consolidated Record Association

A. T. ANGELL, President

PENN YAN, N. Y



HOG CHOLERA

The Problem of a Cure is now Solved

Dr. J. H. Snoddy, of Alton, Ill., has discovered a positive cure and preventive for this terrible disease. He has had it in use for ten years and has saved millions of dollars' worth of cholera hogs for the public. The directions for its use are simple and easy to follow. Any practical farmer can stop the worst outbreaks of cholera that ever come and save every hog that is able to take the treatment.

The following breeders and well known hog raisers have tried the remedy and recommend it highly. T. T. Schouler, Supt, City Home Farm, Worcester, Mass; J. E. Hendrickson, Commission Merchants, Philadelphia, Pa. and Dr. David Alkire, of Marco, Ind., and many others.

Dr. Snoddy has published a small booklet that gives full directions and tells all about it. This little booklet will be mailed free to every person who will write for it. Every farmer and hog raiser should write at once for one of these little booklets. They are free, Address

THE SNODDY REMEDY Co., Box 290, ALTON, ILL.

BACON HOGS IN DENMARK.

Writing on the bacon hogs of Denmark, Professor W. J. Kennedy of the Iowa Experiment Station says: The principal feedstuffs used are oats, barley and rye. These combined with skim-milk and buttermilk, of which every farmer has a sufficient supply, furnish the best known ration for the production of bacon of the very highest quality. In some instances roots and green feeds are used, but these occupy but a minor place in comparison with those feeds previously mentioned.

Some corn has been and is being used, but it is considered anything but desirable as food for the production of high class bacon. It has too much of a tendency to produce fat and bacon of a soft, oily texture.

There is no doubt that dairy farming and bacon production go well together. In fact, it seems to be almost impossible to produce a high quality of bacon without either skim-milk or buttermilk to feed in conjunction with the grain feeds.

These dairy by-products are rich in protein and thus well adapted to the production of lean meat of a good firm quality. In this respect the Danes have a wonderful advantage over many other countries.

Another point which is considered by the Danes of great importance to the pig-rearing industry of their country is the fact that skim-milk is not legally allowed to pass out of a dairy without first being pasteurized. In the opinion of experts this precaution has been responsible for the eradication of tuberculosis from the list of pig diseases in Denmark.

Swine fever is now unknown, and other diseases give little or no trouble since the system of government inspection of farms has been in operation. In this respect the farmers have aided materially by always informing the inspector when any symptom of disease made itself known.

A quart of oil in time will sometimes save buying a new set of harnesses.

THE BIG PRODUCER.

It is not always the cow that is the phenomenal producer of milk that is the most profitable. It is a well established fact that to push a cow far beyond her natural production by feeding her excessive quantities of expensive concentrated foods is to produce milk at a loss. Prof. Dean, of Ontario, says he finds that when a cow reaches a certain production, if you push her beyond that point the milk is produced at more cost. With an average good cow it is possible to get a production of 7000 or 8000 pounds of milk in a year at a moderate cost, but when you get beyond this and try to make a "big record" it adds materially to the cost. Every 100 pounds of milk which a cow produces beyond her natural limit of production costs from \$1 to \$3, hence our dairymen have to study more closely how to feed their cows economically in order to produce milk at a profit. It is not altogether the quantity of milk the dairy cow yields which should receive attention, but the net profit in twelve months is of more importance. Economy in the production of milk is an important factor and the greater is the usual net profit. While the heavy meal feeding may bring large gross returns, it is the grass, silage, corn fodder, and hay that make the profit. However, a certain amount of the expensive foods is essential in winter feeding and it behooves every dairyman to learn to what extent there is a profit in feeding them. Under ordinary conditions, with ordinary creamery and cheese factory prices, it seems to have become a fairly well established principle of feeding cows that the ration should, during the winter season, be composed of about one part of grain to two parts of roughage.

Farmers are like thermometers—we only notice them when they are very high or very low.

A lean horse may do as much work in a day as a fat one, but it will cost more to feed him.

Don't neglect the cow's comfort, but remember that the comfortable cow is a profitable cow.

CHESTER WHITES AND POLAND-CHINAS.

20 choice Spring Sows, open; 25 Fall Pigs, both sexes, and also some very fine yearling bred sows that are extra fine and were prize winners last Fall. 12 head Poland-Chinas from 3 to 12 months old. I never had a better offering in young sows than this.

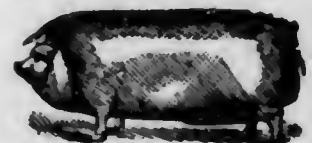
C. R. CRESSMAN,
Bursonville, Bucks Co., Pa.

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Exceptional advantages to introduce our
LINCOLN SHEEP
CHESTER WHITES } to readers of
SCOTCH COLLIES } this paper

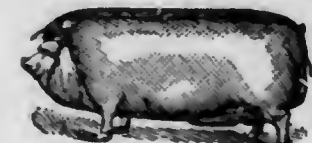
Write your wants immediately. Special offering Scotch Collies and Chester Whites now on hand.



Chester Whites

I have them combining the best blood in Chester County. If you want the good old Chester that has made this county famous, we have them here that will please you. We breed and sell only the best. Write me.

L. WEBSTER, - Kelton, Pa.



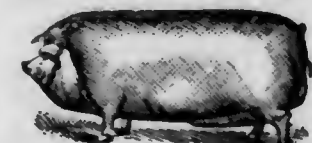
Chester Whites

For years I have been selecting and breeding to build up a herd that would be uniform in shape, stamping other herds with the good qualities that I had succeeded in fixing in my herd. If in need of first-class Chesters come and see me or write your wants. Only the best sold for breeders.

T. A. STEVENSON, Shannon City, Ia.

Bursonville, Bucks Co., Pa.

GREENWOOD STOCK FARMS



Farmers and Breeders I now have a large stock, probably the best I ever owned, thoroughbred Poland-China and Chester White Pigs, 2 to 6 mos. old, sows bred, boars ready for service, all from prize winning stock. Guernsey and Jersey Cattle. Buff and Barred Plymouth R. Chickens.

Farms and Residence, Greenwood, Pa.
Address C. H. DILDINE,
Route No. 1, Rohrsburg, Pa.

BLOODED STOCK : OCTOBER 1906

FOR PRACTICAL STOCK BREEDERS AND FEEDERS.

Entered at the Post-Office at Oxford, Pa., as Second-Class Mail Matter, May 27, 1899.

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Three Years \$1.00
Discontinued at end of
Paid Subscription.

Samples on Application.

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SUBSCRIPTIONS.—Can be sent at any time and will begin with the current issue unless otherwise specified. No receipts will be forwarded unless the request is accompanied by return postage, but failure to receive first copy or any unusual delay should be reported to the publishers.

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THE PERSONAL SIDE.

SOME THINGS ABOUT US AND OUR PLANS

THE CHANGE MADE in Blooded Stock has added greatly to its standing among the other farm papers and with this issue we feel that our readers are getting a better paper than can be obtained anywhere else and for less money. We will endeavor to make the paper not only interesting but to have its columns full of good common-sense reading that will be of value to every one interested in live stock. Therefore, we feel justified in making our subscription fifty cents a year, or three years for one dollar. By so doing we are able to give better service. Send us your subscription or renewals promptly. Show your neighbors a copy of Blooded Stock—we do not know him and he may be looking for just such a paper.

"THINGS TO THINK ABOUT" is the heading of a department that we hope to make very valuable to every reader of our paper. The ideas that will appear under that head from time to time will not all be those of the editor, but those of others as they come to us. We will be glad to have something for this column from anyone. The ideas given under this head are there to think and write about and it is our desire that these ideas will bring out discussions, so that the points brought up will be made plain to all. We will expect anyone to feel free to discuss the matter by writing articles to appear in the following issues. Give us your support along this line and it will do us all good.

A NEW DEPARTMENT is added with this issue that will be very interesting to our readers—the Market Report. These reports are furnished by one of the best market experts in the country and the comparisons made are correct. These reports will keep our readers posted thoroughly and at the same time show how the market compares with the same period of a year ago.

PHOTOGRAPHS of noted or prize-winning animals and views of farms or any other subject that would be of interest to the breeders, are wanted. We will be glad to have any of our readers send them to us and if they can be used in Blooded Stock we shall be pleased to do so, giving the name of owner unless requested not to do so.

Your sending us these photos not only helps us but they prove to be the very best class of advertising for the owners.

ANOTHER THING WE WANT is for every reader to see that the best farmers in his section takes Blooded Stock. You are acquainted with them and a word from you will help us very much. We want agents to look after subscriptions and attend public sales and farmers' institutes. For this work we will allow a liberal commission. Write us at once so that you will be ready.

THE TIME is approaching when you will have a lot of surplus stock for sale and we want to suggest that you attend to this matter at once and not leave it off to the last minute. Now is the time to advertise to catch the good buyers, who are looking around for the best animals, and would not buy those fat show pigs. The good buyers, who buy the best, look out early for the choice animals and are willing to pay a good price for what they want when they find it. You can only get this class of buyers by advertising early. Let us suggest to you that you send us your advertisement at once for three months. When writing your advertisement do it as you would talk about your herd. If you have something extra tell it so that the buyer will know what you have. This will cost you a little more but the results will more than pay for the extra space used. You do not care to purchase something you know little of and do not expect others to.

WRITE US what you think about Blooded Stock and which, in your opinion, is the best thing in this issue. What department do you think is the best and what changes would help the paper? The opinions will help us in our work. We will be glad to have your criticisms.

PRINTING CATALOGUES is one of our specialties. We are often asked this question. We are prepared to do anything in this line. We will make your cuts, design your catalogue and print it for you in almost any style that you may wish. Let us have your sale catalogue or any other line of printing that you may have.

Things to Think About

This Page Open to Any One Having Ideas to Discuss.

Some time ago the writer was at a public sale and the idea came to him as he watched the crowd of bidders, of how many of them ever considered the milking qualities of the male line, and especially notice that the male had well developed milk veins and evenly placed rudimentaries or teats? It was a combination sale and this point was very strong with me when they were selling a lot of nice thrifty boar pigs that were bringing good long prices.

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Have you ever thought of this point? Have you ever noticed the difference in the teats on the boar pigs? Have you ever noticed that the sows sired by a certain male were all good sucklers and then that he was the son of a sow that was a great suckler and that he had a large, well developed set of teats?

-\$-\$-\$-\$-\$-

A poor milking cow isn't worth anything to any farmer. In fact he had better be without such an animal. We look at the heifer to see that she has evenly placed teats and a loose sack and take these as indicating a good prospect as a milker. If this be so why is the same not true with the sow.

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There can be no doubt as to the correctness of the above statements, and if they be so and we expect to breed good milkers why should not the male be selected along the same lines? If like begets like and we select form on this principle, it is only reasonable to expect like to beget like in the milking qualities if it holds true elsewhere, therefore if we want good milking cows and sows we must select the males having the greatest development in these parts.

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We wondered how many of our readers have ever thought of these points when selecting males? Think the matter over and we are sure you will agree that the points are reasonable. It is the men who are watching the things that make a success of breeding, and it is due to their care and attention that they have succeeded, and not to chance or luck as many would say.

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Should these ideas be new to you go down to the hog yard and notice the difference in the development of the teats of both male and female, and if

you happen to have two males, one with large, well developed teats, and the other with very small ones, hunt of the pigs sired by each and see the results. Then go and look at your females and see if your best sucklers are not the ones that have the good udders.

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We want you to watch these points. Study them out for yourself and we are sure that in time you will say that these ideas in this issue are worth many dollars to you, then say a word for Blooded Stock and give us your support.

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That these ideas may do the most good we hope that others will come forward and give us the benefit of their experience along this line, that we may get out all there is in this idea. Write us your views on this subject.

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We mentioned the milk veins on the bull. This may be new to many of our readers but in good milking strains these veins are very distinct, and good breeders are very careful that they be well developed on the males that head their herds. There are many animals on which there are no traces of the veins at all. If you ever noticed them begin at once to look the matter up.

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You have some promising heifer calves of a good milking strain? You are dairying? You can sell the calves at a good round price? Don't you sell them. Keep them and raise them to milking age. Why is the other fellow so willing to give you a good price for the calves? Are you not in the same business with him? Are not the calves as valuable to you as he considers them to be to him? Don't sell off promising heifer calves and try to build up your dairy by purchasing mature cows. Keep all your good calves and rear them.—New York Farmer.

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High-grade milch cows are high-grade earners. Low grade ones are high-grade losers. Earners are cheap at any purchase-price. Losers are cheap at no price, and not even as a gift. The dairyman with the so-called "average cows" ought to be grateful to the pirates who would steal them.—New York Farmer.

Shetlands Pennmoken Farm



SEVERAL years ago, when retiring from mercantile business, L. C. Price, of Lexington, Ky., as a pastime, started to breed Shetland ponies on his great Pennmoken farm, about one and one-quarter miles from Lexington, on the Nicholasville Pike.

Vast improvements have been made in the trotting, the running, the coach, the draft and every other kind of horse as well as other stock and Mr. Price undertook to make improvements in the Shetland pony. He determined to breed them with a view of gaining a finer strain than the ordinary Shetland to be found in the market. He believed this could be done by the proper selecting of stock. To establish beyond a doubt the correctness of this theory, he has not spared any expense in securing breeding stock of the highest quality.

How well he has succeeded, one has only to inspect the finish, style and action of the ponies on his farm as a class. His numerous patrons throughout the United States will tell you how very superior in style and action the ponies coming from Pennmoken Farm are above those of other establishments. In the show ring they have no equal for the animal that can win in the horse show in Lexington the most famous of all horse centres is in itself a recommendation that they can win in any company. For several years Mr. Price has won with his ponies three-fourths of the first prizes and in the Shetland stallion class his famous horse Sterling has never been beaten. Horsemen, who are judges, will tell you that the peer of Sterling, the head stallion, does not



Shetlands at Pennmoken Farm

live. He is not only a success in the show ring, but in the stud, and his colts show their breeding in every case. Last year, Break O'Dawn, a brown and white gelding, was sold by Mr. P. W. Ray, of Lexington, to go to New York, for \$1,000. He was regarded as the best pony that ever left this country.

Persons visiting Lexington will find it a great treat to visit Pennmoken Farm and see the finest herd of Shetlands in America. You will not find the shaggy, cow-hocked, dish-faced, thick neck kind, but a perfect little horse with all of the finer points and developments that makes the highly bred trotter in finish and action. These are to be considered if you are purchasing for pleasure and beauty.

During September a very large importation arrived and one can find a great variety to select from. The brood mares range from 35 to 48 inches in height; stallions 39 to 47 inches and colts from 24 to 40 inches.

Mr. Price is a breeder as well as an importer and owning the largest and finest herd in Kentucky or the South, takes great pleasure in pointing out successes he has made in breeding, and giving his wide experience with his favorites. Besides the pleasure in breeding Shetlands the business is fast becoming a very profitable one. The demand for these stylish, gentle little horses is growing faster than the breeders can furnish them.

Buyers demand a much finer gaited animal now than a few years ago and the prices paid are in accordance with merit as in other breeds of horses.

WHITE WASHING POULTRY HOUSES

THE benefits of white wash for the poultry house at this season of the year are obvious. The Wisconsin Agriculturist gives the following methods of preparation and use:

Slake in boiling water a half bushel of lime, keeping it just fairly covered with water during the process. Strain it to remove the sediment that will fall to the bottom and add to it a peck of salt dissolved in warm water, three pounds of ground rice boiled in water to a thin paste; one-half pound powdered Spanish whiting, and one pound of clear glue dissolved in warm water. Mix the different ingredients thoroughly, and let the mixture stand for several days. When ready to use apply it hot. If a less quantity is desired use the same proportions.

A good whitewash to use upon outside work may be prepared as follows: Slake in boiling water a half bushel of lime and strain as before. Add to this two pounds of sulphate of zinc and one pound of salt dissolved in water. If any color but white is desired, add about three pounds of the desired coloring matter such as painters use in preparing their paints. Yellow ochre will make a beau-

tiful cream color, and browns, reds, and various shades of green are equally easily obtained.

The coloring matter used for white-wash should be dry; colors mixed in oil cannot be used. The quantity of color needed would have to be ascertained by trial. The wash in the pail will have to be much deeper, darker shade than when dry; so that to find out just what color it is, it is necessary to allow a little of it to dry.

Another excellent wash lasting almost as well as ordinary paint, may be prepared for outside work as follows: Slake in boiling water a half bushel of lime. Strain so as to remove all sediment. Add two pounds of sulphate of zinc and one pound of common salt and one-half pound of Spanish whiting, thoroughly dissolved. Mix to a proper consistency with skimmed milk and apply hot. If white is not desired, add enough coloring matter to produce the desired shade.

Sheep are easy to raise if properly handled. Wool is about 35 per cent. higher than the average of the past ten years.

THE OUTLOOK FOR CITY MILK

THE middlemen, those who manufacture as well as those who retail milk, are studying the outlook for milk in these states. As their observation is all from the city end of the line, it is inevitable that their views are clouded. They do not know what the farmers are doing or at what cost milk is produced. In a general way they hold the opinion that there is an abundant supply of milk produced in the territory, and that advanced prices will draw it out.

From the country end of the line, the outlook presents some clear features. The producers of milk have been reducing their herds by cutting off aged cows. They have put on as many heifers and young cows as they have been able to buy, at what they consider "reasonable prices." In all probability there was never a time in the past when there was in this territory so large a percentage of young milkers as now. This feature means that for a year or two, the total production of milk will be somewhat below the average in these states, while the maturing and development of the cows ought to increase the production considerably in 1908 and 1909.

Another feature to consider is the effect of the movement in all the cities for better milk. This movement means that less adulterated and extended milk will be sold, and therefore that the middlemen will have to call on the producers for more whole milk, says the N. Y. Farmer. The extra call will probably wipe out the surplus in most of the city markets and produce a shortage in some of them.

A third feature is the growth of the city markets. Each year sees more consumers in each city.

A fourth feature is the growing demand of the cheese and butter factories and condensaries for milk. Cheese

and butter promise to rule high and to be in short supply indefinitely. The liquid markets will have to compete with the factories in prices, and the producers should profit by competition.

A fifth feature of the situation is the reduction in the milk supply of the towns that inevitably will result from rigid city inspection and the rejection of whatever milk does not come up to the standard set by the cities.

The milk output of the territory is limited, even if it can not be accurately measured. There are just so many cows. They produce just so much milk.

Their production constitutes the supply of milk in the territory, and against it must be set the total demand, present and prospective. Information gathered by this journal indicates that in the territory from Maine to Montana the milk supply is short to-day, and that it will be short for several years to come. Furthermore, there is little or no reason to believe that the supply will be, or can be, made to increase as rapidly as the demand.

The city retail prices for milk are to be advanced. The city officials and middlemen see and say that an advance is necessary. The 4 cent and 5 cent milk sold to the "city poor" has been largely adulterated, skimmed, robbed, watered and doctored milk, and the new city regulations forbid the sale of such milk. Producers are going to receive better prices for their milk.

To-day the situation puts before the milk producers the opportunity of their lives to take and to hold the absolute control of their business. Organization is their need now. Co-operation is their weapon for the future. They are going to put more cost into milk, and it will be their own fault if they do not take more money out of it, enough more to make their business profitable.

SOME SHEEP HINTS

There is, as a rule, very little moisture in the sheep pen from the sheep themselves, and by heavy bedding, particularly at the beginning of the season, the straw will absorb all the urine from the sheep without there being any softness or rotting of the straw, and the pens are not frequently cleaned more than once in a season without injury to the sheep.

There is no farm interest that tends more surely to profit than sheep on lands suited to grazing, especially where weeds and bushes interfere with successful cultivation and on lands too rough to till easily.

Sheep are influenza and so, therefore should always be kept dry and not exposed to sudden changes, as taking them from a warm, close house into the cold air.

Angora goat flesh is now frequently sold in some big cities as mutton. Properly dressed, it makes very good food and few persons can tell it from the real tricle.

An Indiana man, who is one of the few farmers who give some time to sheep raising, says he never lost anything in this branch of his farm industry, and that he believes the general summing up will show a profit. One of the nicer features of sheep raising is that the marketing of the wool brings in ready cash at a time when the farm usually has nothing to market.

A good floor is made by a foot or more of cobble stones, finished with coarse gravel, the whole thing to be slightly elevated above the surrounding ground. No dampness will arise from such a floor or be on it.

While prices have been good, the range between the tops and culls has been very wide, and the necessity for good breeding is more manifest than ever.

The sheep products for the past two years have been fairly satisfactory to sheep growers and feeders. Production has been far short of the demand, as exemplified by the shortage in lamb feed lots.

Most every farmer can profitably handle a flock of sheep, but he should maintain ewes which will produce first-class market lambs.

Prof. Henry rates corn fodder, if bright and nicely cured, next to alfalfa and clover hay

for roughness in fattening lambs.

Here! stop chasing the sheep. They are the most nervous animals on the place and a fright always does them great harm. Sheep have been known to die outright from sudden fright.

Sheep will clear up the left-over stuff from the cow and horse manger.

At the Michigan station they made a gain of 2.15 pounds per head per week on lambs with a ration of corn, corn fodder and a small allowance of roots.



Shetlands at Peumoken Farm.

PREPERATION OF CREAM FOR MARKET.

IN preparing cream for market the milk should be skimmed as soon as possible after it has been taken from the cow. A centrifugal cream separator should be used. There are a number of different kinds made, any one of which will accomplish the desired result. With the cream separator, the cream can be taken from the milk in a very short time. What is most important, probably, is to have the cream of a desired quality after it is skimmed, this is where the average cream produces cream of a better quality than agreed upon one day, if the next day the quality drops down to what has been contracted for, in other words, in order to be satisfactory, the quality of the cream must be maintained somewhere near one standard. In justice to the buyer it must not be of less per cent. of fat than agreed upon, and in justice to the seller it should not be of a higher per cent. of fat than agreed upon.

The simplest way, probably, to maintain the quality of the cream would be to test a sample of the milk from each milking, this sample to be taken so as to represent the milk from the entire milking. One way to take the sample so as to have it representative of the entire milking would be to distribute the milk in each can, then take from each can, say one-half a pint of milk after thoroughly mixing it. This can be done either by stirring or pouring from one can to another. The sample which had thus been taken must be tested for butter fat. A knowledge of the manipulation of the Babcock test is assumed, and no explanation of same will be entered into. The dairyman who attempts to make cream for market and who has not a knowledge of the Babcock test is at a great disadvantage.

After a determination of the per cent. of butter fat has been made and the milk has been weighed, then the pounds of butter fat contained in the milk can be estimated. Assuming that butter fat contained in milk is all carried into the cream in the case of the cream separator, then the estimation is to be made of how many more pounds of cream there should be carrying the number of pounds of butter fat to be of the per cent. of butter fat wanted.

For instance, suppose it is found that the milk from a certain milking weighs 300 pounds, and the sample taken from this milk tests 4 per cent. fat, then 300 pounds of milk carries 12 pounds fat. After separation the cream is weighed and suppose this is found to be 40 pounds, now suppose this cream is wanted to be 20 per cent. fat, there will have to be 60 pounds of cream, 20 per cent. fat to carry 12 pounds of fat, then skim milk is added to the cream until the amount is raised to 60 pounds.

We then have 60 pounds of cream carrying 12 pounds of fat which must be 20 per cent. fat, and is approximately correct, no more and no less. If each milking is handled this way and the weighing and testing carefully done, the quality of the cream will be maintained and uniform satisfaction will be given so far as maintaining a uniform per cent. of butter fat is concerned. As soon as the cream has been taken, and the amount of skim milk added to make it of the desired per cent. of fat, then the cream should be cooled to as low a temperature as possible. If ice is used for this purpose then with a champion milk cooler using ice inside a temperature can be reached by repeated cooling of near 35 degrees F. If, however, no ice is used, then spring or well water must be used in connection with a cooler. The temperature of a great many springs and wells will be found to be near 50 to 55 degrees F. If no cooler is used then a very simple way to reduce the temperature of the cream to near the temperature of the spring water is to put about one-half an inch of cream in an ordinary dish pan, and place the pan on the spring water and by gently stirring with a spoon the temperature of the cream can be reduced to near what the temperature of the spring water

is in a short time. By repeating this the temperature of the entire cream can be brought down to approximately that of the water. After this temperature is reached, it is desirable to maintain it if the cream is to be held. In the case of reducing with ice the cream if near 35 degrees F. can be held for several days in a perfectly sweet condition provided this temperature is maintained, and this can be done by packing in ice in a tub or barrel which has been sufficiently insulated, so as to prevent too much waste of ice from heat from the outside.

Cream prepared for shipment, when cooled in the spring or well water cannot be held and must be shipped to market at least once a day. The cans should be protected in shipment with covers or jackets, these jackets are about one inch thick and made out of felt and cover the can entirely excepting the bottoms, this protection prevents the cold from passing out so rapidly and when shipments are made daily cream can be put into market in prime condition.

It has been assumed that proper means of preserving cleanliness have been observed and it is probably well to say something along this line.

Proper cleanliness can only be brought about by using some fat solvent and afterwards steam for sterilization, says W. D. Saunders of the Virginia Experiment Station in the Southern Planter.

All buckets, cans and other articles used should be first rinsed with tepid water so as to remove as far as possible in this way all milk and grease. Next the water in which the cans, etc., are washed should have some fat solvent dissolved therein, sal soda is good, and such an amount should be used as to remove all grease from the cans, buckets, etc. Experience will show about how much sal soda to use in the water, which should be as hot as can be stood by the person washing. The heat is very necessary for the proper action of the sal soda, or in fact any fat solvent.

After thoroughly washing in this way the cans, etc., should be placed over a steam jet and steam should be allowed to flow slowly into the can and until the can has been heated to a high degree of heat for several minutes, this is to destroy all germs which may not have been removed by the washing, and in this way we produce a sterile or clean condition in the vessel so treated. Where steam cannot be had scalding will accomplish a good deal provided the vessels are allowed to remain in boiling water entirely covered for several minutes, to simply pour boiling water over a can, or a small amount into a can, accomplishes very little.

"Cheap" rams are generally costly.

Keep strange dogs away from the flocks.

There is no animal so perfect that it may not be injured or ruined by poor feeding or care.

Don't try to raise more sheep than you have room for. Better to raise less and do a good job.

If your sheep have scab or ticks, dip them. They will make you money with these little troubles.

Don't frighten your sheep under any conditions. See that the hired man has his voice keyed low.

Sheep on the wild lands of Wisconsin, Michigan and Minnesota are clearing up the brush and making the property worth at least \$1 per acre more every year.

You can keep sheep and cur dogs at the same time. However, if you must keep dogs, feed them meat frequently and hitch them to a log chain over night.

You should talk to your sheep as often as you are with them, as it will enable them to know your voice. If you speak kindly, you may be able to prevent a panic.



Seen at Peumoken Farm

English Methods of Feeding Sheep and Lambs for Market Purposes.

PROF. W. J. Kennedy, Iowa Agricultural College, writes the Iowa Register his experience and observation among English sheep breeders. He says:

In the feeding and fattening of lambs for market purposes, two rather distinct courses are pursued. A great many farmers follow the practice of having their lambs come early in the season, from the latter part of January to the middle of March, while other farmers prefer having their lambs come in the months of April and May. Those who rear only lambs aim to grow them rapidly so that they will be ready for market in the month of June or the early part of July. Those who prefer the April and May lambs claim that when lambs are dropped at that season of the year that they are not so troublesome as early lambs, as the ewes do not need as much special feeding on grain, cake and succulent foods, that warm sheep sheds are not a necessity, and that they need the lambs during the summer and fall months to utilize the wastes of the farm, especially those of the stubble fields from which the crops have been harvested. Where late lambs are reared much care is necessary during the summer months, and old pastures must not be used as grazing ground, else parasitic troubles are almost sure to attack the flock and cause serious losses. In the rearing of early lambs the mothers are very liberally fed on clover hay and one and one-half pounds per ewe per day of a grain mixture, consisting of linseed cake, oats and bran; or cotton cake, oats and bran. Some other feeding stuffs are used, but those mentioned stand in highest favor. As a rule, there is not any roughage used in the fattening of lambs during the fall months, but those who do not furnish any food use either clover hay or straw chaff. The chief reliance is placed on the use of the green crops and the roots, especially the turnip crop. A strong point advanced in favor of folding lambs is that it leaves the ground in a very high state of fertility for the next crop. The feeding of sheep for fattening purposes is practiced more or less throughout the entire year. The fall and winter months, on account of the large quantity of root crops and other forms of green food available at this

season, are the times when the greatest amount of sheep feeding is done. During the spring and summer months a considerable amount of feeding is done through the use of cotton and linseed cake in conjunction with pasture grass and some green crops. The fall and winter methods of feeding sheep are much the same as those practiced in the case of lamb feeding. Folding on some form of green crop, such as rape, kale, or cabbage, or on the root crops, especially turnips, is the custom. The grain ration is composed of either linseed or cotton cake, and some one or more of the following grains: Oats, corn, barley, peas, beans or lentils. Where yard or shed feeding is practiced during the winter season the rations usually consist of clover hay, mixed hay or straw chaff for roughness. The amount varies from one to two pounds per head per day. Of roots for succulent food the amount fed ranges from 12 to 20 pounds per sheep per day, and from one to two pounds each per day of grain and cake. Of this amount about one-half is either cotton cake or linseed cake, or a mixture of the two, and the remainder is composed of oats, barley, peas, beans, corn, dried brewers' grains, or lentils, fed singly or in mixture. This method of feeding has given satisfactory results, but is not nearly so popular as fall feeding where folding on green crops or root crop is practiced.

While some farmers aim to fatten their sheep on grass alone, the majority of farmers use cotton or linseed cake, or a combination of the two, to the extent of one to two pounds per sheep per day in addition to the grass. For grass feeding the undecorticated cake is preferred on account of the astringent properties, which have a tendency to counteract the action of soft grass.

In all sheep feeding operations, be it summer or winter, the English shepherd aims to furnish at least one-half of the ration, and in most instances more than half from some succulent food. To the American visitors it is surprising to note the large quantities of green or succulent food used during the winter season, and the corresponding large amount of concentrated food, especially cotton and linseed cake, fed during the summer months.

A GREAT DISPERSION SALE.

THE dispersion sale of Col. Casey's Tebo Lawn Herd, of Illinois, is referred to in the Live Stock World in most complimentary terms by Prof. Mumford, of Illinois, who says:

"Only about one-third of the offering were Scotch, the rest being Scotch topped Young Marys, Henriettas, Rose of Sharons and Pomegranates. The representatives of other families and lines of breeding than Scotch were popularly known as the Casey mixture.

With the foundation of the families named, he purchased bulls of superior merit, and of recent years used Scotch bulls altogether with which to top out the Casey mixture, because he saw in cattle of this breeding the qualities he wished to fix at Tebo Lawn.

The Casey mixture, as a whole, represented choice individuality, as the herd had been frequently culled and the mediocre animals sent to the shambles. The Casey mixture, part of the consignment sold at moderate prices, occasionally one sold for over two hundred, but the bulk sold from \$100 to \$150. Only once was an unusual price paid for a representative of this breeding and this when the magnificent cow, Rose Victor, was sold after spirited bidding at \$600.

Imported Choice Goods, the St. Louis World's Fair champion, topped the bull offering at \$5,000, and Imported Marengo's Countess, the females, at \$2,111.

Many considered Rosedale Violet 9th and imported Clara 58th the most valuable cows in the sale, as judged from their records as producers Rosedale Violet 9th sold to the University of Illinois, and is the dam of the herd bulls in use by four of America's leading Shorthorn

breeders, while her female offspring, which were numerous, sold in this sale at prices ranging from \$400 to \$1,300 each.

Imported Clara 58th sold to Mr. Gentry of Missouri. Her produce in the sale consisted of the two-year-old bull, Conqueror, and two heifers, Clara Belle and Claret, the former selling at \$1,500 and the heifers at \$1,000 and \$1,005 respectively.

Such cows are frequently not appreciated presumably because of their age and somewhat stale appearance. Young untried heifers sell better because they look better and perhaps because of the other advantage of having before them the promise of a long career of usefulness.

Here are some of the figures from this great sale to which Prof. Mumford refers. It took place at Kansas City, Mo.

11 bulls brought.....	\$12,115.00
Average.....	1,101.36
166 female lots.....	51,212.50
Average.....	308.51
177 lots altogether.....	63,327.50
Average.....	357.78
Top on bulls, \$5,500; top on cows, \$2,150.	

No danger of a panic in the sheep business. Mutton caters are growing faster than the sheep.

Don't try to raise more sheep than you have room for. Better to raise less and do a good job.

THE PONTIACS.

SOME years ago a carload of cattle was purchased from Brookside Herd as foundation stock for the Eastern Michigan Asylum Herd, Pontiac, Mich., and in the shipment was Netherland Hengerveld's daughter, Magadora, at that time in calf by De Kol 2d's Butter Boy. Magadora was an exceptional cow, both individually and in producing ability. She was low down, broad, level, heavy barreled, wedge shaped, and of the ideal dairy type. She carried an absolutely perfect udder, of wonderful size; and her milk vein development was extraordinary. In handling she was unusually fine, having a soft, flexible hide, with hair like velvet, and in general appearance she was one of the finest looking cows that ever left Brookside Herd. She was a cow that would attract attention in any stable, and in conformation and build, looked as if easily capable of making at least 25 lbs. of butter in 7 days. The calf she was carrying when she left Brookside Herd, proved to be a bull; and the Steward of the Eastern Michigan Asylum very wisely decided to retain this animal to grow up and place at the head of the herd. The sire, De Kol 2d's Butter Boy, was known to be one of the best sons of De Kol 2d, and the dam, Magadora, was recognized as being one of the best daughters of

Netherland Hengerveld. The two grandams were, therefore, the two great cows, De Kol 2d and Netherland Hengerveld, whose official 7-day butter records of 26.57 lb. and 25.66 lb. stood for several years as the largest ever made.

The youngster thus royally bred was named Hengerveld De Kol. He grew up into an animal of more than ordinary excellence as an individual, and when his daughters became old enough to commence making records, it was discovered that the remarkable cross in breeding which he represented had produced in Hengerveld De Kol the greatest transmitting sire of the breed. Up to this time the leading O. R. A. sires had come to the front on account of the excellence of some of their daughters. Hengerveld De Kol won recognition through the quality of all of his daughters. Every one was extraordinary, and nearly all have done or are doing extraordinary work in official test.

Conditions at the Eastern Michigan Asylum have not been favorable for making large records. The work of milking and caring for the cattle is done by the inmates, and until recently none of the cows were milked oftener than twice a day, even during an official test. Being a State institution, the policy of the management has been to maintain the herd as a source of milk supply rather than as a breeding establishment, and the carrying out of this idea has been a hindrance to the making of large records. However, the daughters of Hengerveld De Kol, whenever tested in other hands, have not failed to bring honor upon the institution which they represent, and the word "Pontiac" is today accepted as standing for the best that has yet been attained in the breeding of Holsteins.

When Hengerveld De Kol was nearly eight years old, Mr. E. C. Smith, the efficient Steward of the Eastern Michigan Asylum, turned him over to A. A. Cortelyou, President of the H.-F. Association, for \$1,500. It is doubtful whether five times this amount would buy him at the

present time. In June, 1905, one of his daughters was sold from our herd in public auction for \$1,000, and about the same time we had occasion to refuse an offer of \$2,000 for another.

We were fortunate in securing a number of Hengerveld De Kol's daughters before many of them had been officially tested, and have since added to these from time to time, whenever any could be found that were for sale; but the steadily advancing price of stock bred in these lines has made more difficult each succeeding purchase, and at the present time no other strain commands as high figures as the Pontiacs, either in public or private sale.

While Brookside Herd is entitled to the credit of having bred the champion A. R. O. sire of the world, it must be a matter of pride to all who are interested in Holsteins that the breed should have produced a sire so preeminently distinguished above those of all other dairy breeds, for certainty of transmitting ability as evidenced in the phenomenal producing qualities of his daughters.

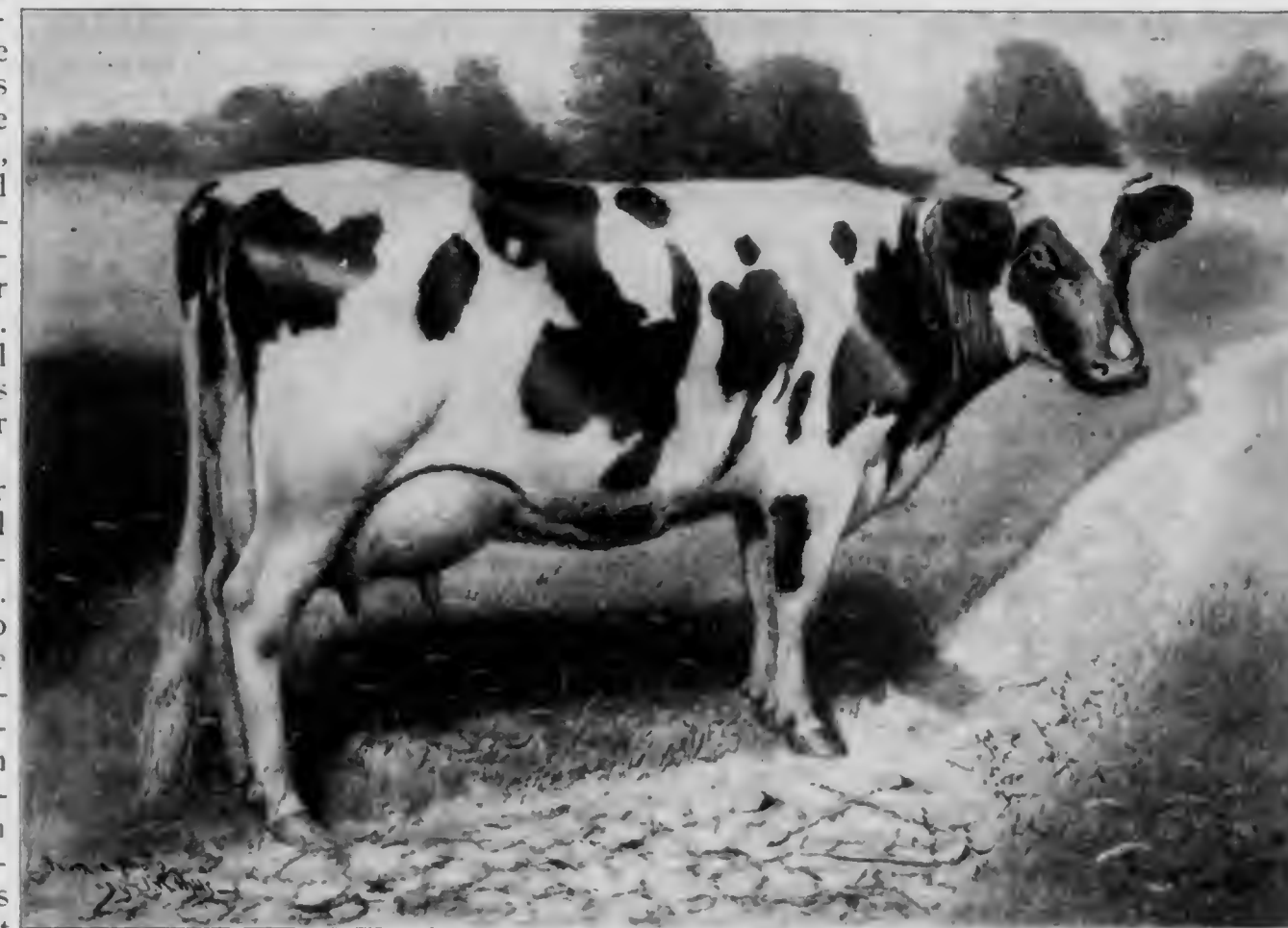
It is hardly necessary to call attention to the development of the Eastern Michigan Asylum herd as an illustration of the influence of the sire. Mr. Smith has always aimed to use only the very best bulls, and his success as

a breeder has been largely due to the wisdom exercised in their selection. His first purchase from Brookside Herd included the now well known A. O. R. sire, Sir Inka Aritis Mechthilde, seven of whose daughters have made official 7-day butter records averaging 20-33 lb. each. Among the daughters of this bull are the dams of some of the best Hengerveld De Kol heifers, and five of these granddaughters of Sir Inka Aritis Mechthilde have made official 7-day butter records, at two years averaging almost 17 lbs. each.

Another noted sire was Pontiac Korndyke, and he, likewise, was selected from Brookside Herd. The cross formed by mating this bull with the daughters of Hengerveld De Kol, seems to be an especially fortunate one and is producing some of the best record heifers ever officially tested. In June, 1905, Pontiac Korndyke was sold to an enterprising Eastern breeder for \$1,000.

It may be added that in January, 1905, Mr. Smith purchased of us another young bull of superior breeding and individual merit, to maintain the succession of high class sires at the head of the Asylum Herd. It has thus been the privilege of Brookside Herd to supply not only many of the foundation animals but also the leading sires for an establishment that has become famous as the home of the Pontiacs—the greatest producers of the breed.

Deer are multiplying so fast in Connecticut that the game commissioners are receiving notices of claims for damages from the farmers by the wholesale. In the peach belt peach pickers find that the deer are working injury to the peach crop and to market gardens. It is expected that at the next general assembly the farmers will force legislation to check the increase of deer which the law protects until 1911.



Magadora, dam of Hengerveld De Kol, World's Champion A. R. O. Sire.

DAIRY POSSIBILITIES

THIS journal is constantly receiving inquiries like these, says the New York Farmer:

"You advise producers to put on pure-bred, high-grade, heavy-milking cows. Would common or average producers of milk be able to buy such cows? Would not such cows greatly increase the glut of milk in the liquid markets? Would the milk of such cows be profitable for the manufacture of cheese and butter and casein?"

These questions come from owners of dairy herds of all sorts and sizes in all parts of a dozen states. In some cases answers and advice have been given by letter, but the increasing number of queries shows so wide and deep an interest in the question of economic, and therefore profitable, production of milk that it seems in order to offer some suggestions that may interest and benefit all producers.

In the first place, the milk producer can "afford" to buy any cow that will return him milk enough to pay the purchase price, to cover all the expenses of her keep, and to give him a good profit, so that, when she is beefed, he is richer for having owned her. No producer can afford to buy any cow that can not thus reimburse him. If the \$150 or \$200 cow will do this, any producer can afford to buy her. If the \$20 or \$30 cow will not do this, no producer, not even a millionaire fancy farmer, can "afford" to buy her.

In the second place, no one advises the producer, who is milking 30 cows that average, say, 3,000 pounds of milk per head per year to sell or beef the 3,000-pound cows and put on 30 cows that will average 9,000 pounds of milk per head per year. If that were done, the production of milk would be trebled, and prices would shrink proportionately. The suggestion is that the thirty 3,000-pound cows be replaced by ten 9,000-pound cows. Then the producer would get 90,000 pounds of milk from ten cows instead of thirty cows. His 30 cows may cost him \$40 a head, or \$1,200, and for \$1,200 he could purchase 10 cows of the \$120 class, which would probably average 9,000 pounds per head.

In this change we would still have 90,000 pounds of milk on which we would save two-thirds of the cost of production. He would save two-thirds of his present cost of labor of feed, of interest on investment, of depreciation of herd, and of all other costs. This means that, in case his 3,000-pound cows make milk at a cost of 3.3 cents a quart, his 9,000-pound cows will make it at a cost of 1.1 cents a quart, and further it means that, while his 3.3-cent milk sold in a 2.9-cent market nets him a loss of .4 cent a quart, his 1.1-cent milk sold in the same market will net him a profit of 1.8 cents a quart.

Thus the \$120 cow would enrich him, in spite of her high purchase price, and the \$20 or \$30 cow would impoverish him even if she be given to him when she is ready to begin her profitless milk career.

In the third place, the large-yield cows would be profitable in all the lines of milk utilization. The examination of Holland proves this. In no other country are there cows that yield so heavily as do the cows of Holland. In no other country do producers of milk, cheese and butter make so regular and satisfactory profits as do the producers of Holland. In no other country are cow values so high as they are in Holland. Yet the Hollandish producers make money in competition with the product of other countries in which lower cow and land values prevail.

The great average production of the cows of Holland explains the situation. The cows are developed to great size. Their carcasses are bred to fit their frames. All their organs are developed to match. The result is milk in great quantities and of the finest quality. The net total is wealth for Holland.

In the fourth place, what is done in Holland may be done in the United States, and is done here in many cases. For illustration, there is a farm near Princeton, Mass., owned by Mr. John B. Marcou, who has a herd of 23 cows of what may be called the large-yield class. In the past year this herd, starting with cows ranging in age from 1 year to 8 months up to 6 years 2 months, yielded from 6,355 pounds of milk for the youngest up to 15,557.75 pounds for the oldest, and averaged 9,003 pounds of milk per head for the whole herd.

The 26 young cows in the year past produced 220,072.25

pounds of milk, that averaged 3.7 per cent. of butterfat. That means 7,661.67 pounds of butterfat, while at 85.7 per cent. means 8,940.10 pounds of butter or 388.7 pounds of butter per head. Supposing that Mr. Marcou had sold his milk in the New York City market, or at the New York City prices, he would have netted about 2.899 cents a quart for it. His 207,072.25 pounds of milk, equal 96,313 quarts, and the net returns would have been \$2,729.11, or about \$121.40 per cow.

Had the milk been churned, the product would have been 8,940.1 pounds of butter and 1,981.32 hundredweights of skim milk or buttermilk. The skim milk at 20 cents a hundredweight would have been worth to the producer \$396.26 to feed back. The 8,940.1 pounds of butter, if of a good quality, would have sold for about 25 cents a pound, or \$2,235.03, making a total return of \$2,631.29, or an average of about \$114.40 per cow, against the liquid market return of \$121.40 per cow. Thus these large-yield cows which were enormous profit-earners in the liquid market, would have been nearly as great earners in the butter line, even at the low price of butter in this computation. In the cheese line these cows would have done as well as in the liquid and butter lines.

Other herds of large-yield cows may be cited, but this one will serve as an illustration to answer the question of our correspondents, and to give them a basis for calculating the finances of their occupation. Mr. Marcou disposes of 207,072 pounds of milk in a year. He is at liberty to make it with large-yield or with small-yield cows. He chooses to make it with fairly large-yield cows and requires 23 cows to make it.

Had he chosen to make it with small-yield cows, he would have needed perhaps 69 cows to make it. With the 69 cows he would be compelled to provide three times as much equipment, three times as much labor, and three times as much feed, and to pay three times as much on the other cost elements. In that case his returns per cow would have been only \$40.47 or less per cow, and as the keep would average \$50 to \$60 per cow, he would have come out behind on each cow, while with the heavy-yield 23 cows he cleared \$50 to \$60 per head.

Do our producer-questioners see the point? Can they fail to see which of the two kinds of cows they can "afford" to own?

Every producer of milk should thoroughly study every detail of production before he goes into the business. The average costs are practically fixed quantities, for instance, so much feed, so much roughage, so much concentrates per cow, so much labor, so much taxes, so much interest, so much deterioration charges, and the producer should select cows of large yield, so that the average cost per quart of milk shall be cut to so low a notch that the milk may always be able to sell at a profit in the markets.

There are great possibilities in dairying, and the greatest and surest of them lie in cows of the best class. This truth is generally ignored by the average dairyman, who gauges everything by the purchase price of the cow, while the true gauge should be the milk-making and profit earning capacity of the cow.

A POINTED QUESTION.

A writer in the Farm Journal has sharpened his pencil down to this sharp point:

Two cows cost \$40 each per year for keep. One of them yields you 4,000 quarts of milk a year that brings you \$86. The other yields 1,200 quarts that bring you \$26. The latter loses for you about \$14 and reduces the gain on the former from \$46 to \$32. Why do you keep the 1,200 quart cow? You would be better off with the one that clears \$46, for you would have only half the investment, half the work and half the feeding, and you would gain \$14 each year.

There would be no surplus butter on the market for years to come and prices would rule strong if all the cows were eliminated which are kept at a loss. Dairy farmers have not yet half waked up to an understanding of the great practical importance of weeding out the unprofitable cows from their herds. Many a man would make a fair profit, that now faces constant loss, if he would keep only such cows as pay a profit on their keep.

Selecting a Stallion for Breeding

IN a group of horsemen a few days ago the discussion turned on the selection of a breeding stallion. The man who started up the talk began by saying that for his part he would not care whether a stallion was a prize-winner or not so long as he suited him. A man of wide experience then asked the question: "Would you apply that rule if you were breeding race horses? It seems to me," he went on, "that among draft horses the show-ring is much the same as the race is to race horses. You wouldn't try to breed race horses with a stallion that never won races himself or showed the ability to win races, and it seems to me that it is not sensible to expect a stallion to beget prize-winners when he is not a prize-winner himself," says Jas. Hope in Kansas Farmer.

A stallion is a prize-winner in the draft classes because he represents the conformation and action best suited to produce the greatest usefulness for the purpose for which he is intended. In other words, the stallion is a winner because he represents the best draft conformation and way of going, just as the race horse wins because he has the most speed and endurance. It is not necessary to enter into any technical discussion of race horse breeding at this time. It will suffice to say that with few exceptions the greatest winners have been the greatest sires. Therefore the chances for success in breeding draft horses are measurably increased by the selection of stallions that have won in the show-ring or of those most like them. It is impossible, of course, for one to obtain a great prize-winner, but by examination of the great horses and closely choosing after their type advance is to be made.

We are close upon the State fair and horse show season. From now until the International Live Stock Exposition is held in Chicago, during the first week in December fairs will be held almost every week at which great draft horses may be seen by those who go afield to learn. Never was money spent to better advantage than in attending a State fair or great horse show. Money paid out for such a purpose

must not be considered as coming under the head of expenses. On the contrary, it is well invested. No man who is in the business of breeding drafters or who contemplates engaging in it can invest capital to better advantage than in seeing all there is to be seen in his line at the State fairs and shows. It will pay him the grandest sort of dividends.

It is anticipated that the shows will be better filled with great drafters this year than they ever have been in any previous season and that is saying a great deal. This will prove true perhaps more in the instance of the Percherons than in any of the other breeds. The double champion of the two great French shows—at the great Central Show of Paris and the show of the French Percheron Society at Mamers—is a dark grey 2-year-old named Gueridon. He is a big horse and perhaps the highest-priced one that ever left the shores of Gaul. An Argentine buyer offered Mr. James B. McLaughlin 35,000 francs for Gueridon, but the offer was refused. A stallion for which \$7,000 has been refused and which bears the distinction of the double championship at France's greatest shows should be a great object lesson. There will be many more great horses on exhibition this fall from the same stables and others. They will present the most admirable opportunity for comparison and selection. It is for this reason that I urge the advisability of attending the shows. To examine closely the prize-winners is a liberal education in itself.

Exhibitors of horses are, as a rule, the most approachable of men and most of the judges nowadays are freely willing to giving their reasons for their placings if addressed in the right way. If the breeder of draft horses will but go the right way about it, he will be the gainer every time. He will learn why he is more likely to succeed as a breeder if he uses a prize-winner or a horse more closely approaching that type than he will if he picks out one further down the scale of excellence. Use the best sires all the time.



Growing into money.

FATTENING HORSES FOR MARKET

PROF. W. J. Kennedy, Iowa College of Agriculture, says one of the most important points to be considered in the preparation of horses for the market is to have them properly fattened. This applies to all classes of horses, but it more especially applies to draft horses. Usually carriage horses and other types of horses intended for driving purposes carry a sufficient amount of flesh. They should be fat enough to give them a smooth appearance.

The draft horse, however, is a different animal. He must be unusually fat to sell to advantage. Nine-tenths of our draft horses which are sold weighing from 1,600 to 1,700 pounds should be made to weigh 1,800 to 2,000 pounds. The draft horse market is a peculiar one, as weight is the important factor in determining price.

Usually every 100 pounds in a draft horse after he weighs 1,600 pounds is worth 25 cents a pound; every pound from 1,800 to 2,100 is worth about 50 cents a pound; thus the importance of having the horse real fat.

In the preparation of driving horses for market, feeding should be somewhat different from that practised in the fattening of the draft horse.

It is always best to water before feeding any class of horses, and never after feeding until two or three hours have elapsed. Salt should be kept within reach of the animals at all times.

In feeding the driving horse, do not make the common mistake of feeding too much. About three-fourths pounds of hay per day for every 100 pounds of weight of the animal is sufficient. That is, a horse weighing 1,200 does not require more than 9 pounds of hay daily. The hay should be pure and free from dust.

For grain, a mixture of oats, corn and bran, fed in the proportion of about 50 pounds of corn, 50 pounds oats and 25 pounds bran, makes a very good mixture. Feed about one pound per day for every 100 pounds of the animal. In some instances, however, it may be necessary to feed some what more.

THE COW ALWAYS

An observant visitor to the large cities must be impressed with the fact that the horse in various lines is being supplanted by the mechanical motor, and I think there is no manner of doubt that for the transportation of heavy loads expeditiously and at a minimum of cost the horse is going to be more and more displaced by the machine. I think, further, that the machine is coming very rapidly countryward; and as its cost becomes more and more cheapened, and its utility adapted to our uses, we farmers will find it supplanting many of our horses, both in the fields and on the roads.

Now, in thus prophetically hinting at the evolution of the motor and its more extended adoption for utilitarian purposes, I am not forecasting "the passing of the horse," nor is it my intention, in finally coming to the cow, to discuss the reasonable possibilities of mechanical motor application to farm needs and conditions.

I may add, however, in passing, that the present good prices for horse-flesh, especially for farm uses, is no proof that the thousands of machines now in use doing horse duty are not the forerunners of displaced horses in the future, for it must be remembered that a very large proportion of the machine owners are rich people who own horses galore, also; and that another large proportion is made up of rich people and fools, who in their manner of driving their machines fully demonstrate they have not wit enough to drive a good horse, even if they had pride enough to own one.

The rag-tail-and-bob-tail contingent of the autoists are not horse people. They even haven't horse sense. Instead of supplanting the horse by the machines, they are wrecking the machines, killing themselves, and, incidentally, a good many humble citizens who walk.

In the section in which I live not one per cent. of the thousands of horses and mules in use on our farms are bred on the farms, says W. F. McSparran in Farm and Fireside. A good pair of farm horses or mules will cost at this time \$400 to \$500. For the latter price I am sure a traction machine using gasoline or alcohol will be built that, on ordinary-sized farms, will much more than do the work of the pair of animals. The machine motor will do our plowing, our tilling and seeding. It will pull the manure spreader, the mower, the grain-harvester, the hay-loader, in addition to performing many stationary mechanical operations now necessary in advanced agriculture and live stock husbandry. It in time will probably do its part in the morning and evening chores of milking the cows.

But the Cow! Ah, the cow, nothing may displace her, nothing supplant her. She is as much a farm fixture as the traditional farm mortgage, which she is doing her best to make a tradition of the farm—a memory only; she will displace the mortgage if given a fair field in her race to that end. She has done it time and again. She is doing it, and she grows not weary in well doing. But

I think she must often grow exceedingly tired of the handicaps her owner so often burdens upon her, of the neglect she suffers and the indignities of the ignorance of proprietorship fretting her faithful patience.

We may till our land, cultivate our crops, gather the harvest and grind the grain by machinery, but no machine will ever be fashioned to do the work of the cow. We may use small potatoes, corn-stalks and things to make alcohol to run a machine to work a contrivance to milk the cow, but that is, as I have said, mere work. The cow herself must make the milk.

Chemically there is nothing in the milk that is not in the water the cow drinks, the grass, the grain, the juices, saps, fiber, elements she eats, but no artificer with skill and cunning, can gather those elements from the brook, the air, the growing grass, the ripened grain, the curd hay, the rustling fodder, and transmute them into the milk, the fluid of life given us by the cow. Surely no machine may crowd her out. She is collateral with our civilization, for without primary milk man cannot be well fed, and when not well fed he reverts to type, the savage.

Therefore, the place of the cow in the economy of the universe being fixed, when her end can only come with the final passing of the last farmer—and of all the race, of course, the farmer will be the last man, as being essentially the most fixed man, and as he was the first man—shall it not eminently be in harmony with his work for and with the universe that he shall do a yeoman's work in building and training the cow into a more perfect, and consequently a more profitable animal?

She shall never go out of useful fashion, she shall never lose her place nor her importance, and the man who works for her betterment and the extension of the use of her products shall not lose his labor.

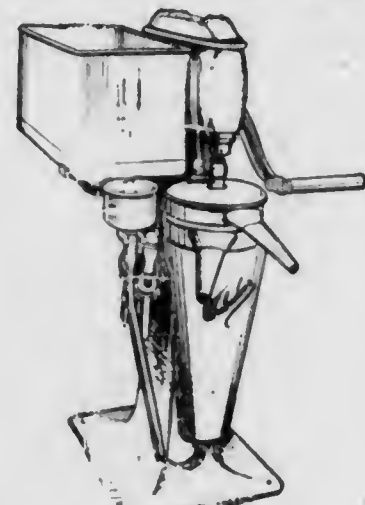
At a great auction of great dairy cows, I recently saw sold for \$2,500 the finest, the most perfect, the most

BLOODED STOCK for October

beautiful cow it has ever been my pleasure to see. She was beautiful and perfect as a great stalk of corn is so, as a waving field of wheat is so, as the pine on the mountain or the oak in the deep woods, fashioned for her life's work. And as I looked at that cow, standing as a model for earnest men to work to, I thought of the thousands and thousands of cows I have seen, grading all the way down from that queen and her class to the lowest types of the droves of discouraging, bloodless scrubs.

Because You Need The Money

It's your business, and if you don't attend to it who will? You cannot afford to keep cows for fun. That isn't business, and, furthermore, it isn't necessary. There is money in cow keeping if you go at it right, and besides there is more fun in going at it right than there is in staying wrong.



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BLOODED STOCK for October

We can't all buy \$2,500 cows, but we can all get an inspiration from them to lead us upward from the \$25 ones. It is only when men want better that they get better.

That I have a poor cow is not the poor cow's fault, it is my fault. The cow is probably doing the best she can in such an owner's hands. If the owner were doing as well as she, she might have a show of doing much better.

WHERE DIRT CAME FROM.

Doubtless every housewife who handles milk feels certain that she has kept it free from dirt, even if she has not the latest and best dairy contrivances. But "proof of the pudding is chewing the bag," to use a homely maxim, and in a talk recently before the Nebraska Dairymen's Association Mr. J. H. Rushing told this little incident, which should be suggestive to those disposed to learn:

"I was in Iowa at one time, traveling with a hand separator agent. We stopped at an elegant farmhouse. The wife was a cultivated lady. Hand separator men always want to sell separators, of course, so we got permission after supper to separate the cream. They had read about the separator and felt kindly toward it. They had about fifteen cows. The lady was there, and the farmer was there; she was a housewife from away back; she thought everything she did was just right—a very bright woman, however. We separated the milk and all went nicely. She thought it was nice cream, but where did all that dirt come from that is in the separator?" She went to the pail and exclaimed again: "Where did all that dirt come from?" We said it came out of the milk. She said: "It is impossible." We were given to understand that that milk was clean and that they did not have any such milk from their cows; that it came from the separator. The gentleman of the house had a twinkle in his eye, and stood back as a sort of spectator. Well, we could not convince that lady, with all the nice talk that a separator man could put up, that that dirt came out of the milk. She said: "You just stay right here tonight and we will skim the milk in the morning, and I will wash the separator myself, and I will see when the milk goes in the separator that it is clean, and I will see whether the dirt comes out of the milk. I have prided myself on having clean milk, but you pay for your lodging if the dirt don't come out of the milk." We thought we had a snap, and accepted the invitation. The next morning the lady was around. The cows were brought up and milked, and the (separator) bowl shone like a looking glass. I have never seen such a clean bowl in my life since. (Laughter.) We skimmed that milk, but there was the same quantity of dirt in the bowl that there was the night before. Well, that was an object lesson for that lady. You could not convince people five years ago that those conditions existed in the milk."

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A DIFFERENCE IN BULLS.

But few men appreciate the wonderful difference in bulls, and probably one of the greatest hindrances to the development of a good dairy herd is the indifference which is paid to the selection of a sire. There is no surer or quicker way of building up a dairy herd than the use of a strong, vigorous and prepotent bull which comes from a family of good milking cows. Good animals cost more than scrubs and consequently farmers do not think there is enough difference in bulls to pay the extra cost for a good sire. But here is an expression from a practical breeder.

Mr. W. J. Gillett, of Rosedale, Wis., a prominent Holstein breeder, says about the purchase of a high-priced bull: "The hardest battle I ever fought was years ago to lead myself to pay the sum of \$300 for a bull calf for use on our pure-bred herd, but I can now say, had I paid \$3,000 for this same sire, the sum would not have equaled his worth, nor been commensurate in value to the great dairy characteristics he stamped upon his offspring."

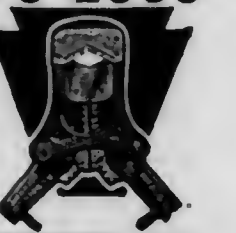
Of course there are men who will not give their cows daily care and

under such circumstances the scrub bull will be quite as serviceable to them as the most highly developed dairy sire. The dairymen who are taking the proper care of their herds cannot afford to use scrub bulls.

—Hoard's Dairyman.

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FAT OR THIN

I have been asked, "Should a brood sow be fat or thin?"

Neither, says P. C. Holme in American Swineherd, if by fat we mean properly in butcher or show condition, or if by thin we mean the thinness that indicates insufficiency of nutrition. The advocates of thin flesh for brood sows argue that such sows as a rule farrow strong litters and suckle them well. They cite the elm-peeler, or the sow on the commons that hunts her own living, as prolific breeders and good sucklers. Some go a little further and claim that when we want to develop the highest vitality and endurance we must feed and exercise the animals so as to develop muscle and lung power and get rid of all superfluous fat. This is done in training of race horses. They are fed muscle-forming food and not fat formers. They are exercised regularly and to a degree that would kill a fat horse or one fed liberally of fat-forming feed.

The force of these illustrations seems to me to teach that to put an animal in the strongest condition for endurance—which is taken as high vitality—we must feed for it, then exercise for it. Feed and exercise are essential for the highest physical condition. We grant that much. But when we apply this reasoning to the brood sow it has its limitations, when we consider the use to which the brood sow is to be put. Action and endurance are of the first importance in the race horse; but in the case of the brood sow her business is not, on well-regulated farms, to be trained to outrun a dog or a nigger, as has been said down south, but to produce pigs that will respond promptly to feed and make the most pounds of growth possible for the feed consumed. The profits of the business come from converting things grown on the farm into flesh, or condensing coarse and bulky farm products into the most wholesome and merchantable kind of meat possible, and at the least cost.

Now comes the old want of the profitable feeding hog. Our fathers studied that well and found they could not make the best growth of butcher hog from the roving sow, that was never quiet but always on the hunt. Her pigs partook of her nature and developed snout, leg and bristle and nervous energy that used up immense amounts of feed and left little over for laying on flesh. For a flesh-maker there is a limit to the nervous energy permissible. It is the animal of quiet temperament that lays on flesh readily and does not waste feed in an outlay of force unnecessary for healthful and harmonious growth of frame and muscle and fat. It is well established in the history of our improved breeds of cattle, sheep and swine that the tendency to lay on flesh readily is a matter of heredity as well as of feed. The condition of the dam at the time of birth affects this quality of flesh-making. Dams

that have shown the most profitable offspring as feeders at an early age and have had a good store of adipose tissue stored up at time of birth of young to draw on to furnish a spring. The surplus fat now goes to the young, and the effect of it is seen in the thicker, fuller flesh of the offspring. There is also a force in the claim that the offspring take on the type and tendency to feed well or ill, to run fast or slow, to grow large or small, as did the dam and sire.

If this be true then the dam of flesh-forming animals ought to be in good flesh at time of birth, and ought to carry as good and strong an amount of flesh as is consistent with vigorous health. As soon as the dam or sire takes on enough fat to be a burden and tend to debilitate, we pass to a condition that tends to weakness and that lowers powers of endurance. As maternity lays a heavy tax on the strength of the dam, it is clear that we can easily carry our idea of improving offspring by feeding the dam on too much fat-forming feed, and especially for so long a time as to induce weakness and aptness for disease.

The sow of the breeder of improved swine evidently must not be fat enough to weaken her or reduce vitality to a danger point, but so long as heredity and long-established tendencies have influence on the offspring, so long must the swine-breeder avoid the two extremes of fatness and leanness in breeding stock. In pure-bred animals quality rather than

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quantity has been the breeder's aim. Not how many but how good is the motto of all successful stock breeders. The idea is as old as Esop and older, for he tells a fable of a wolf taunting a lioness because she bore only one whelp at a time, while the wolf bore many and often. The lioness replied: "One, but a lion."

There are men arguing against some of the best breeds of swine and cattle because they are not as prolific as elm-peelers and some other breeds not yet removed from them. Not how many but how good has been the motto of men who have made their mark as breeders. The wise breeder recognizes there are unprofitable extremes of fatness and leanness and avoid them.

M. T. Phillips, Pomeroy, Pa., manufacturer of the famous Keystone Dehorner, known the world over as the leader, is advertising in this issue. No dehorner made has ever been a successful competitor with the Keystone. It is easily worked, cuts clean and does not crush. If you do not have a machine attend to it at once and have one at hand so as to be ready to remove the horns when the cattle are brought into the stable.

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JERSEY RED PIGS FOR SALE

"Meal Time"

I am offering for sale some choice young Jersey Red Pigs, and will be pleased to quote prices on anything you want, from a single pig to as many as you need. While my stock is of a superior quality my price is low enough to make it a profitable investment for every customer who buys. A guarantee of safe arrival in good condition goes with every animal shipped and my reputation is back of every transaction. I honestly believe that I am offering the best value for the money in this country. My celebrated pure "Jersey Red Pigs" are growing in favor every day, they are money makers. They are small-boned, vigorous, prolific, and easy to raise. Get a pair of these pigs and watch your wealth increase. Every "Jersey Red" sow is a gold bond—her litters are the coupons which you convert into cash. Write today—tell me what you need, I will tell you what I have.

ARTHUR J. COLLINS, Box A, Moorestown, N. J.

BLOODED STOCK for October

FATTENS SHEEP WITHOUT GRAIN.

W. P. Adams, Sacs county, Iowa, fattens thousands of sheep yearly without a cent's outlay for grain. Mr. Adams has ten sections of land devoted to raising corn. To help keep up the fertility of the soil he sows clover once in five years to turn under as a green manure. As practically all of the manurial value of the clover may be had after sustaining a flock of sheep, he pastures the clover until ready to turn under in early fall and grows a good bunch of lambs and hundreds of pounds of good mutton on wethers and dry ewes.

He has no permanent fences on the farm, but has proved there is money enough in this way of managing sheep to make it profitable to invest in four miles of movable fence with which to make fields on the section of clover devoted to sheep pasturing. The temporary fences are built of panels 18 feet long, made of four-inch strips of inch pine lumber and triangular brackets three feet high. Two men can take down and set up a mile of this fence in a day.

When we visited Mr. Adams' farm, he was pasturing two flocks, one of 1,200 ewes and their lambs, the other of 1,000 wethers and dry ewes. Each flock had the run of about 100 acres and was given a fresh pasturage every two weeks throughout the season. This was made possible in the following manner:

At the opening of spring, a fence is run through the middle section to remain there through the season. At right angles to this, a fence is run on the section line and another about a third of the way down the section; then fences are run on the section lines parallel to the center fence, which gives two fields of about 100 acres each.

When the sheep have pastured in these fields ten days or two weeks, the fences on the section lines are taken up and swung around so as to form two new fields of about 100 acres each.

After the sheep have pastured in these for ten days or two weeks, the fences are again moved, and the un-pastured balance of the section fenced into two fields of about 100 acres each.

When these last two have been fed on two weeks the first portion of the section fed off has about four weeks fresh growth, the fences are moved to where they were first built in the spring and the sheep are again in green pastures, says the American Farm World. This rotation is continued throughout the season. This plan can be worked on small lots just as well.

In the fall, when the huskers have cleared a field of corn, sheep are turned in to pick up the corn that has been left, for, no matter how clean the husking has been done, there will be many bushels left.

A careful man on horseback and a good dog or so will look after 1,000

FIRE PROOF WATER PROOF RUST PROOF ROT PROOF

That's the kind of a roof we sell, and that's the kind of a roof you want—will stand up in any climate, and is complete without painting. There are a number of good reasons why Flint Coated



is better than tin, iron, slate, paper, tar or gravel. Our new illustrated booklet explains all of them and will be the means of saving you money. In order to show you how good Lincoln Flint Coated Roofing is we will be glad to send you samples of different kinds. Write for them today.

LINCOLN WATERPROOF CLOTH CO.
707 Church St., Bound Brook, N. J.



or more sheep in the stalks. The sheep are not allowed to wander all over a section at a time, but are kept on a given area until they have cleaned up the waste on it. Then they are moved to a new area.

While eating the waste corn, they get roughage, and, being furnished what salt and pure water they want, they thrive and lay on fat. As ready for market, they are shipped by the carload direct to Chicago.

When the waste corn in the fields is all saved, the sheep are fed screenings from the previous corn crop. Mr. Adams does not believe in paying freight on light corn, chaff and other "trash" to reduce the quality and price of his corn, so it is all screened and fanned before being shipped, and the screenings carefully housed for sheep feed.

If at any time the corn, or the corn screenings need balancing to give the sheep a proper ration, it is done with

wheat screenings, also produced upon the farm. Wheat is sown once in five years rotation, and, like the corn, the wheat crop is thoroughly cleansed before sending to market and the screenings saved for the sheep.

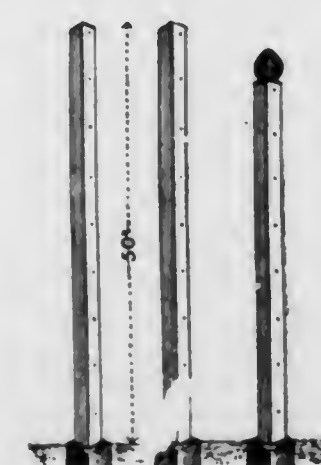
Mr. Adams makes money raising corn and makes money from the waste the sheep save for him.

They Last Forever

STANDARD
Steel Fence Posts
are to be driven one third cheaper than wood posts.

Can be used with pl in, barb or woven wire fencing. Posts made for all requirements. Over 75,000 sold. Twenty miles of fencing erected on one estate. Write for circulars, price list and references to

J. H. DOWNS
235 Broadway, N. Y.



STEEL ROOFING
PER 100 SQUARE FEET
\$1.50

FIRE WATER AND LIGHTNING PROOF

Most economical and durable roof covering known. Easy to put on; requires no tools but a hatchet or a hammer. With ordinary care will outlast any other kind. Thousands of satisfied customers everywhere have proven its virtues. Suitable for covering any building. Also best for ceiling and siding. Fire-proof and water-proof. Cheaper and more lasting than shingles. Will not taint rain-water. Matches your building cooler in summer and warmer in winter. Absolutely perfect, brand new, painted red and siding, each sheet 24 inches wide and 24 inches long. Our price on the corrugated, like illustration, sheets 22 inches wide x 24 inches long **\$1.00**. At 25 cents per square additional we will furnish sheets 6 and 8 feet long. Steel pressed brick siding, per square **\$2.00**. Fine Steel Beaded Ceiling, per square **\$2.00**. Can also furnish standing seam or crimped roofing.

WE PAY THE FREIGHT TO ALL POINTS EAST OF COLORADO except Oklahoma, Texas and Indian Territory. Quotations to other points on application.

Satisfaction guaranteed or money refunded. We will send this roofing to any one answering this advertisement C. O. D., with privilege of examination if you will send us 25 per cent of the amount of your order in cash; balance to be paid after material reaches your station. If not found as represented, you do not have to take the shipment and we will cheerfully refund your deposit.

Ask for Catalog No. W-687. Lowest prices on Roofing, Eave Trough, Wire, Pipe, Fencing, Plumblings Doors, Household Goods and everything needed on the Farm or in the Home. We buy our goods at the lowest prices and deliver to you.

CHICAGO HOUSE WRECKING CO., 35TH & IRON STREETS, CHICAGO

SWINE BREEDING POINTS

Conclusions Based on Exhaustive Experiment Station Research.

The Missouri Experiment station draws the following conclusions from its exhaustive swine feeding experiments:

It is of great importance that the nutrients be present in the food in that proportion of greatest efficiency known as the balanced ration; and when corn is as low in value as 30 cents per bushel, with other feeds at corresponding prices, the balanced ration of corn and linseed oilmeal was more profitable for dry-lot feeding than any other ration tested. In addition to being a balanced ration, it is also of prime importance that the feed be palatable.

Nutritive ratio alone does not determine the economy with which the nutrients will be used. A ration poor in protein but palatable, digestible and concentrated may be more efficient and profitable than a balanced ration not possessing these characteristics. Palatability may in a measure compensate for a lack of protein.

Hogs fed on corn and linseed oil meal ate more, made greater increase at less expense than with any other grain ration tested in dry-lot feeding experiments. The quality of the pork produced was unsurpassed and the tendency of these feeds to make real growth as well as fat was greater than of any other ration tested.

Wheat middlings make a profitable supplement to corn, rank a close second to oilmeal as to profit. The gains in weight with corn and middlings were considerable less, however, than with corn and oilmeal.

Oilmeal as fed in these experiments is a more efficient supplement than middlings as here used. With it a larger proportion and value of corn may be fed and less cash outlay required.

As the money paid out for the purchased supplement comes from the sale of corn, if we feed oilmeal rather than middlings, we have a smaller proportion of the corn crop

to market as grain, the larger proportion to market concentrated into pork, a smaller weight of supplement to haul back to the farm, greater manurial value of the feed purchase and less cash outlay involved in the enterprise.

Gluten feed, substituted for half of the oilmeal of the balanced ration, reduced the efficiency of the ration and the profit from its feeding. Being itself a corn product it is not naturally adapted to supplement corn, since other feeds will add more mineral matter in which all corn products are deficient, and for hog feeding add greater variety and palatability to the ration. The protein contained can be bought cheaply along with much more mineral matter in linseed oilmeal.

Oats of the grade used make an unprofitable supplement to corn for hog feeding. They were not relished and made poor gains, at great expense, both in feed and dollars.

Bran as here fed was a useful supplement but was less efficient and less profitable than the same proportion of middlings. If the hog needs the cornmeal ration extended or lightened by the addition of such a feed as bran, this need must be very slight and not to be compared with the necessity for protein or mineral supplement or palatability.

Corn-and-cob meal contains too much indigestible and unpalatable fiber and costs too much in the preparation. Grinding is more efficient than soaking, the last, however, costs much less and is nearly as valuable; both methods are very useful and well worth the cost, even when corn costs as little as 30 cents a bushel.

Straight corn feeding does not support normal growth, nor produce rapid gains; the rations in which liberal amounts of protein were fed, produced marketable hogs in much less time than did corn alone. The hogs ate very much more of the supplemented rations and made larger and cheaper gains.

Oilmeal as fed in these experiments is a more efficient supplement than middlings as here used. With it a larger proportion and value of corn may be fed and less cash outlay required.

As the money paid out for the purchased supplement comes from the sale of corn, if we feed oilmeal rather than middlings, we have a smaller proportion of the corn crop

A schoolboy assigned to prepare an essay on "Ducks," wrote, it is said, as follows: "The duck is a low, heavy-set bird, composed mostly of meat and feathers. He is a mighty poor singer, having a hoarse voice caused by getting too many frogs in his neck. He likes the water and carries a toy balloon in his stomach to keep from sinking. The duck has only two legs and they are set so far back on his running gears by nature that they come pretty near missing his body. Some ducks when they get big have curls on their tails and are called drakes. Drakes don't have to set or hatch, but just loaf, go swimming and eat. If I was to be a duck I'd rather be a drake every time."—Ex.

The dairy farmers of the United States use 10,000,000 cows on 4,000,000 farms to produce 1,500,000,000 pounds of butter yearly. The dairy-men of Holland would use about

1,000,000 cows to produce that quantity of butter yearly. The Holstein-Friesian cows would revolutionize the milk business in this country.

F. W. Morgan, Morgan Farm, Beloit, Wis., recently purchased from James Qurollo of Missouri, the Berkshire boar, Lord Bacon, for \$3,000. It was from the same breeder that A. J. Lovejoy & Son, Roseoe, Ill., bought the now famous sire, Masterpiece, which after two years' use in their herd they sold to W. S. Corsa, Whitehall, Ill., for \$2,500. Lord Bacon is a grandson of Masterpiece and is described as a most promising pig. The price paid for him establishes a new record for the breed.

Make a start in sheep this fall by buying twenty-five high grade ewes and a pure bred ram. We did this and sold enough of the increase the next spring to more than pay for the first investment.

BLOODED STOCK for October

As a rule that sheep breeder is most successful who breeds as nearly in a straight line as the requirements of his flock for new blood will permit, and who is best able to judge the points of an expected choice animal before they are fully developed.

FOR SALE—SHORT-HORN BULL CALVES

Chester White Pigs of Various ages
One extra fine Boar that should please anyone.

JOS. T. FLEMING, Belleville, Pa.

Primrose Herd Large English Yorkshires.

From Imported Stock. Second to none. Write wants.

A. A. BRADLEY, Frewsburg, N. Y.

COTOCTIN STOCK FARM

Large English Yorkshire

Sired by "White Side Comet, No. 4726," son of "S. H. Coston Eclipse 1" winner of first in his class, also champion and Grand Champion, over all ages at St. Louis Fair, 1904. Pigs of either sex and sows bred for sale at reasonable prices.

CHAS. S. SNOOK, Utica Mills, Md.

CHAMPIONS

CHESTER WHITES

PRESCOTT BOY Twice winner at the Iowa State Fair: will have fine sows bred to him for sale. Some extra choice stock. Write

J. H. MAHANNAH, North English, - - - Iowa.

Best in Years Poland Chinas

Ohio Sunshine 2nd, yearling bar. Good one March and April boars sired by O. S. 2nd, Standard Sunshine and Correcting. March gilts by O. S. 2nd. Also bred sows later.

Registered Rams large, smooth, heavy-bearing. Write for prices, description and breeding to

W. H. CRESWELL, CEDARVILLE, O.

FOR THIRTY YEARS

BROOKSIDE HERD has been producing and developing the kind of Holsteins that have helped to make the breed famous for milk and butter production. Commencing with only a pair—as good as could be bought, this herd now numbers 350 head, and for years has carried off the honors in the official competitive butter tests of the H. F. Association. A good herd to buy from.

THE STEVENS BROS.
Brookside Herd, Lacona, N. Y.
Hastings County. Farm near Lacona and Liverpool (near Syracuse)

C. M. GRIFFIN

Charleston - - - Illinois

Breeder of

High-Grade O. I. C's.

Some fine gilts five to twelve months old, bred or open. Young boars ready for service. The finest lot of fall pigs that ever happened. Let me hear from you. I will please you. Reasonable prices.

BLOODED STOCK for October

BREEDING MORGAN HORSES

Early in the last century New England in general and Vermont in particular were famous for their Morgan horses. These horses were small, but well built, compact, and very good roadsters, with powers of endurance little short of remarkable. From Vermont they were distributed over the entire United States and over a considerable portion of Canada, the blood entering into light harness stock of both countries and having an effect of great value. The principal effect was the endurance and stamina which it gave. With few exceptions it did not produce extreme speed. For this reason the passion for speed in the light horse, at all costs, caused Morgan breeders to neglect conformation and quality, and even that stamina for continuous travel for long distances for which the Morgan was noted. The small size of the Morgans was also a fault when market requirements were considered. The result was that Morgan mares were mated with standard-bred stallions of other strains to get speed and increased size, and the Morgan type was very largely bred out. These standard-bred horses were not of the Morgan type, and in many cases were not desirable individuals for breeding purposes. Even in Vermont the effects of these crosses are found on every hand. In the southern part of the state it is hard to find horses showing the Morgan type, but farther north they are more common.

Believing that the Morgan characteristics were too valuable to the horse-breeding industry to be lost, the Bureau of Animal Industry of the Department of Agriculture had established a stud in co-operation with the Vermont Experiment Station to revive interest in the Morgan breed. The type selected is that of the old Morgan, with size and quality. With increased size the Morgan horse will answer the requirements of the market for light horses and will be a profitable horse for farmers to raise.

Nine mares and two fillies were bought in June. They are uniform in type, with full-made bodies, fine heads and necks, full hind quarters, good legs and feet, and abundant quality. Seven mares and two fillies were purchased in Vermont and two mares in Kentucky. Those bought in Vermont are by such sires as General Gates, Bob Morgan, Young Ethan Allen (a full brother in blood

of Daniel Lambert), Denning Allen, Rocky Mountain, and Gillig. The Kentucky mares are by Harrison Chief, out of Morgan mares, and are in foal to the saddle stallion Highland Denmark, a horse of splendid conformation and quality and an excellent stock getter, says the Farm, Field and Fireside. Some of the Vermont mares were in foal at the time of purchase. Those not in foal will be bred to the Morgan stallions General Gates, Frank Allen, and Rex. A stallion will not be purchased at present, as sufficient funds are not available. The introduction of Harrison Chief and other saddle blood was thought desirable on account of the great effect the blood has had on the quality of the harness horses for which Kentucky is famous.

These mares were bought by a board composed of Prof. C. F. Curtiss, Director of the Iowa Experiment Station; Mr. Cassius Peck, of the Vermont Experiment Station, and Mr. George M. Rommel, Animal Husbandman of the Bureau of Animal Industry. In addition to the characteristics mentioned above, the board insisted on pure trotting action and discriminated sharply against pacing or any tendency to mix gaits. Pacing strains in the pedigrees were also avoided as far as possible.

The mares are temporarily on a farm rented by the Vermont Experiment Station near Burlington and will be moved to the college farm as soon as fitted up. A barn has been remodeled and is very well adapted to the purpose for which it is to be used. Selection of type will be rigidly practiced and undesirable animals culled out from time to time. Mr. W. F. Hammond has been appointed to conduct the work at the experiment station. Mr. Hammond has had a lifelong experience in horse breeding in Vermont and is descended from the Hammonds who developed the Vermont Merino Sheep.

DISINFECTANT AND LICE KILLER FOR DAIRIES.

George Y. Neill, proprietor Elmwood Farm, and breeder of Holstein Friesians, Theresa, N. Y., writes us: "Have used Zenoleum in my barns and on my stock, and consider it the best and cheapest disinfectant and lice killer in the world. I keep a supply on hand throughout the year, and would not be without it if it cost \$5.00 a gallon. Two or three applications, full strength, will cure hoof-rot; in fact, there is no cut, sore or wound on any kind of farm stock that Zenoleum will not cure. Zenoleum only costs \$1.50 per gallon, prepaid. A single gallon makes one hundred gallons of disinfectant. You can get it from the Zenner Disinfectant Company, 49 Lafayette Ave., Detroit, Mich."

VETERINARY COURSE AT HOME.

\$1200 year and upwards can be made taking our Veterinary Course at home during spare time. Taught in simplest English; Diploma granted, positions obtained for successful students; cost within reach of all; satisfaction guaranteed; particulars free. Ontario Veterinary Correspondence School, London, Can.

Angus Cattle

as good as the best. Must sell 15 choice bulls quick to make room. Write for bargain.

MYERS & SON., Bridgeville, Del

KENDALL'S SPAVIN CURE

Time tried. Stands every test. Spavin, Ringbone, Curb, Splint, Lameness, Swellings—all readily yield to the great horse remedy.

ALWAYS ON HAND.

Morris Plains, N. J., June 14, 06.

Dr. B. J. Kendall Co.,
Dear Sirs:—Please send me your Horse Book. Kendall's Spavin Cure is the best liniment I ever used, have used it for three years and always kept it on hand. Respectfully, W. E. Teets.

\$1 a bottle. Six bottles for \$5. Greatest known liniment for family use. All druggists sell it. Accept no substitute. Our great book, "A Treatise on the Horse," free from druggists or

Dr. B. J. Kendall Co., Enosburg Falls, Vt.

No More Blind Horses For Specific Ophthalmia, Moon Blindness and others Sore Eyes, BARKY CO., Iowa City, Iowa, have a cure.

Farmer's Sons WANTED with knowledge of farm stock and fair education to work in an office. \$60 a month with advancement, steady employment, must be honest and reliable. Branch offices of the association are being established in each state. Apply at once, giving full particulars. The VETERINARY SCIENCE ASSOCIATION, Dept. 12, London, Canada

HARNESS

AT FACTORY PRICES

Made to suit YOU. Any style you want. From "Out-Home" related stock. Satisfaction guaranteed or money back. Illustrated catalog No. 2 and price list FREE. Send for it at once.

THE KING HARNESS COMPANY
19 Lake St. Oswego, N. Y.

STANDARD

GREEN BONE CUTTERS

Make poultry keeping profitable. Cut green bone is a real money-making poultry food easily prepared with this machine. Small size, \$8.50; large ones more. Made by responsible concern. Ask for Free catalog, prices and Trial Plan.

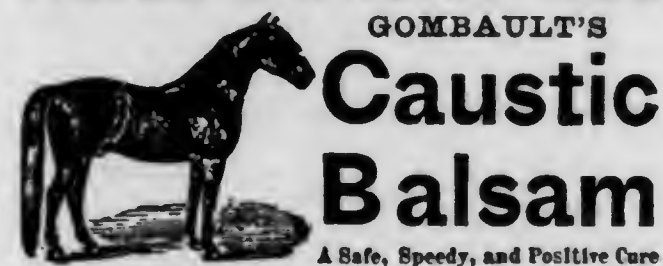
Standard Bone Cutter Co., Milford, Mass.

Shropshire and Oxford Cross.

A Wisconsin correspondent of the Breeders' Gazette, Chicago, writes:

A few suggestions from an old shepherd with some experience in the business in the southern end of our state may be of interest. The best and most profitable ewes I have found are the native ewes of the northern part of the state. I cross them with Shropshires and Oxford rams alternately. We have in this community a very progressive firm of stock buyers and shippers who every fall buy thousands of lambs from the northern part of our state and distribute them amongst the farmers on contract to clean up corn fields and stubble, proving a profitable investment to all concerned. This firm also in its business is often able to obtain breeding ewes in its consignments and dispose of them to the farmers of its territory and I now know of several flocks paying big dividends. I have a neighbor who reported 130 of these northern ewes, having two-thirds twins. I sheared a lot last year of 150 that were raising 160 per cent of lambs. These sheep are mostly from high altitudes, are always healthy and free from catarrh, parasites and other troubles. They thrive amazingly in the grain and corn sections of the southern part of the state.

Horse Owners! Use GOMBAULT'S



Caustic Balsam

A Safe, Speedy, and Positive Cure

The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Hemorrhoids from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.

THE LAWRENCE-WILLIAMS CO., Cleveland, O.

AMONG THE BREEDERS

Gallup and Townley, Jackson, Mich., offer a large number of English Yorkshires for sale. They have some of the finest pigs to be found in Michigan. Write them for prices and particulars.

Leonard Pellett, West Liberty, Ohio, has offered a lot of Rose Comb Brown Leghorns raised on a farm, best strains at \$1.50 each. This is very reasonable for good healthy birds. Write him early and get good selection.

W. H. Creswell, Cedarville, Ohio, writes us that he has just purchased "Surprise Wonder 5th," which is 22 months old and weighs about 600 lbs. Mr. Creswell has a great herd of Poland-Chinas and anyone needing good stock in this line will do well to write him.

C. M. Griffin, Charlestown, Ill., breeder of high grade O. I. C. swine, is advertising a fine lot of stock. Mr. Griffin has been one of the best breeders in Illinois for years. If you want something from him better write at once.

Holstein Cattle breeders needing something fine in their herds, should look up the advertisement of Stevens Bros., Lacona, N. Y. Probably no other farm has raised so many famous cattle as the Brookside herd. On page 9 of this issue we give the record of what some of their animals have been. Write them and mention Blooded Stock and you will get the best attention.

The Ontario Veterinary School, London, Canada, is offering a course of study taught by mail. This is a good opportunity for stockmen to gain a first-class knowledge of how to take care of their own stock. The knowledge gained in this way would be of benefit to every one and can easily be obtained by study during the long winter evenings. Look up their advertisement on page 17 of this issue and write them for information.

The King Harness Co., Owego, N. Y., a firm that is beyond dispute, are advertising harness at factory prices, made to suit any style, from oak-tanned stock. They guarantee satisfaction or money back. Any one needing harness of any style should write this firm. It will pay you to send for catalogue—you will obtain a lot of valuable information about harness.

The time is approaching when your poultry will need attention after the snow falls. Now is the time to make preparation for taking care of your stock during the winter. Send a postal to the Standard Bone Cutter Co., Milford, Mass., for a free catalogue, and look up the points about the bone cutters. You can do this in the evenings and gain some knowledge.

Leffever Bros., Oblong, Ill., owners of the famous prize-winning herd of Duroc-Jerseys, are offering a choice lot of breeding stock, bred from their famous prize winners. This firm is so well known to our readers that it is not necessary for us to make explanation. Look up their advertisement and write them if you need Durocs.

A. A. Bradley, Frewsburg, N. Y., writes us that his Yorkshires are doing fine. He now has six head of imported Yorkshires, all in fine shape. This is because he always has some of the very best animals to be found in the country in his herd. Mr. Bradley also breeds Holstein cattle and Rhode Island Red chickens. Parties wanting good animals should look up his advertisement and write him.

How to prepare ground for grass seeding is something worthy of close attention. The President of the Cutaway Harrow Co. has written several articles on this subject. Our readers will do well to write him and secure this information. Mr. Clark will be glad to give parties information on this subject. He has had years of experience and what he has to say would be of value to anyone. Don't neglect this but write at once and

study this subject during the winter evenings.

Myers & Son, Bridgeville, Del., who keep one of the largest herds of Angus cattle in the east, are offering to sell some choice young stock. Their herd contains blood of the most famous animals in the country and breeders needing a first-class bull should write them at once. See their advertisement on page 17. Don't delay because they are offering these choice animals at prices that will take them quick.

P. F. Hamilton, Cochranville, Pa., who has been an advertiser with us for years, is offering a very large lot of hogs, calves and poultry at reasonable prices in this issue. Mr. Hamilton's prices in this issue.



ilton, whose likeness we herewith give, does not need an introduction to our readers as he has been a well known advertiser in a large number of the farm papers for years.

Hog Cholera—This terrible disease is making its appearance in many parts of the country. It is in a very violent form this year and is destroying many hogs where it has appeared.

There is now before the public a remedy for this terrible disease that has stood the test of time. A number of the most prominent hog men and breeders have given their opinion on this remedy, among which is Dr. David Alkire, Marco, Ind., who has used this new treatment in his general practice for several years, and he comes out in a strong letter of endorsement and says if plenty of the remedy is properly used it will save more than 90 per cent of a sick herd. This seemingly would be a wonderful success. The Doctor says he has saved almost every hog that can take any. He is a competent veterinarian and can tell you all about this new treatment for hog cholera. The remedy is manufactured by the D. J. H. Snoddy Remedy Co., Alton, Ill.

D. T. Root, Connorsville, Ind., also has given the remedy a thorough test and found it a success and says he will not be without it at any price. He has used it for three years.

J. T. Harper, Belmont, Mo., writes us that he has given this treatment a thorough test in a very bad outbreak of cholera and it proved out all right, curing the sick and preventing further development on the well ones.

G. W. Cleveland, Keene, Ky., has used the treatment a number of times and reports it a success in every case. The Snoddy Remedy Co., of Alton, Ill., has a book which fully explains this new method of treatment, which will be sent free to any one who will write them, giving their name and post-office address. The book is free. Let every hog raiser write for it.

BLOODED STOCK for October

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent or exchange, poultry, poultry supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants, and vegetables. The cost of advertising is

Only Two Cents a Word, all classified. Each initial or number counted as one word. No advertisement taken for less than 25 cents each issue. All replies must be sent direct to advertisers. Cash covering the exact number of words at 2 cents each must be sent with every order.

This Department for Live Stock Only

CATTLE.

CORNUCOPIA and SARCASTIC LAD Blood. Pure bred Holstein bull calves, sired by Sarcastic Cornucopia Johanna Lad 38550. Here you have the two most fashionable strains. Every breeder wants them. Circular. Also O. I. C. Pigs. W. CRUSER, Montrose, Pa.

NEW IDEA Holstein Bull Calf for sale. Registered. Business bred. F. S. BRONG, Saylorsburg, Pa.

SUNNY SLOPE HERD of Red Polled Cattle—the best and dairy breed. Choice young stock for sale. L. H. WALKER, Reed City, Michigan.

JERSEYS—Combination and Golden Lad For sale—10 cows, 10 heifers and 20 bulls. S. E. NIVIN, Lendenberg, Pa.

FOR SALE—Eleven pure bred Holsteins Cows, from 2 to 7 years of age. Some of them have a record of 80 lbs. milk in one day, and 31 4-5 lbs. of butter in seven days. This stock will be sold at a bargain as I am going out of the business. S. F. WILLIAMS, Canton, Pa.

HOGS.

REGISTERED DUROCS—Pairs and trios not akin. Stock of all ages for sale. WM. HARSHMAN, Utica Mills, Md.

POLAND-CHINA PIGS, sired by Kentucky Meddler, he by Meddler, the great World's Champion at St. Louis. Price \$10. V. C. RAZOR, Salt Lick, Ky.

GET SOME Improved Large Yorkshire Pigs. Hundreds are glad they have these pure breeds. Price low. Money back if not satisfied. Write now. HARRY B. BILLINGTON, Wells, Minn.

MISCELLANEOUS

SOUTH JACKSON Stock Farm—Registered Large English Yorkshires. Spring pigs and sows bred to farrow September. GALLUP & TOWNLEY, Proprietors, Jackson, Mich. Route 6.

SPORTING and Pet Dogs, Cattle, Sheep, Swine, Pigeons, Ferrets and Rabbits. Ten cents fifty-six page illustrated catalogue. C. G. LLOYDT, Dept. 2B, SAYRE, PA.

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POULTRY

WHITE and BARRED Plymouth Rock Fowls and Mammoth Bronze Turkeys. R. H. McFADYEN, Oxford, Pa.

CHOICE WHITE ROCK Cockerels, (Fisher strain), \$1.00 each during September and October. ARTHUR BENNINGER, Berlinville, Pa.

ROSE COMB Brown Leghorns. A choice lot of cockerels at \$1.50 each. Best strains. Farm raised and healthy. LEONARD PELLETT, Route 3, West Liberty, Ohio.

GREEN BONE and Clover Cutter, Shell and Grain Grinder combined. Single Comb Rhode Island Reds. Circular free. L. H. STEWART, Erie, Pa.

BLOODED STOCK for October



During the month of September there were received at the Chicago Stock Yards 297,240 cattle, which is a decrease of 17,185 from the same month last year. The movement of western range cattle has been at full flood and with ample supplies of westerns to draw on the buyers have not fallen over themselves to purchase medium and inferior lots of cornfeds. As a matter of fact they prefer the western grassers, which are well shrunk out from their long journey on the cars and cost them less in the beef, quality for quality, than do the medium corn-fed natives. This, however, is not true as regards the good to choice grades of corn-fed cattle which occupy a place of their own, a place which the westerns do not fill. Therefore they are comparatively independent of competition from that quarter and have sold well throughout the entire month. To-day, October 1, a load of very good well bred Angus and Shorthorn steers, averaging 1403 lbs., brought \$7.00, which is 5c above any other sale to-day. There have, however, been very few cattle here recently good enough to approach the \$7.00 mark. We look for well fattened native corn-fed cattle to bring satisfactory prices, that is to say to continue at about the present range for an indefinite period. As regards the common to good classes, which are now about 25c lower than ten days ago, we anticipate a steady and for the most part rather slow market during the present month, or until the bulk of the westerns are marketed, which will be about the first of November, after which we may reasonably expect better demand and improved prices for short-fed corn-fed native steers.

Receipts of butcher stock have been very heavy during the past week or so and prices are considerably off from the best point of the month and the same is true as regards stockers and feeders. Receipts of thin cattle, including all classes of young stock, are liberal, affording good selections so that persons expecting to buy stockers and feeders to put on corn or to rough through the winter will do well to send in their orders at an early date while the supply is large and in good variety. On account of frequent and marked fluctuations it is hardly prac-

ticable to quote values on this class in a monthly publication, but if any readers of this paper are interested in the market we should be pleased to give them any desired information and keep them in touch with the trade.

Receipts of hogs for the month of September were 453,723, or 21,021 less than the same month a year ago. The first nine months of the year show a decrease of 89,452, compared with the same time a year ago. Prices for the month of September show very little change from the month of August, except on common packers and hogs of good weight. This class of hogs is selling from 50c to 75c per cwt. higher than they did at the opening of the month. A year ago we quoted choice butcher weights at \$5.75, while to-day the same class of hogs sold up as high as \$6.80. The average cost of hogs to-day was \$6.47½, while on the same day a year ago it was \$5.38, two years ago \$5.88, three years ago \$5.73, four years ago the average cost of hogs was \$7.41. To-day we quote choice light hogs from \$6.70 to \$6.75, and choice heavy from \$6.60 to \$6.70. Packers sold generally from \$6.25 to \$6.50. The quality for the past month shows an improvement over the month of August.

We do not look for very heavy receipts of hogs for the next six weeks or two months. The packers are very bearish on the hogs at the present time and are just buying enough to fill the fresh meat orders. On the first heavy run we get we look to see the packers pound the market. They all claim that hogs are high, the way the product is selling. Some of the packers are talking of breaking the market down to 5c. per lb., but we are very doubtful if they can get the choice hogs under 6c. From the best information we can obtain from the different parts of the country, the hog run will be short this winter, as the hogs are very closely marketed. Parties having hogs ready for market, think it would be advisable to come forward, as we do not see anything that would warrant holding hogs any longer.

Receipts of sheep and lambs during September numbered 466,943, which is 138,810 head less than reached Chicago during the same month last year. As a result of the compara-

tively moderate supply and very brisk demand for both fat stock and feeders prevailing during a large part of the month, values advanced to a high point, \$8.00 having been paid several days in succession for choice fat lambs. During the past ten days or two weeks, however, the tendency has been in the other direction and the market at present is considerably below one month ago and from 50c. to \$1.00 per cwt. lower than the high point of the month, so far as lambs are concerned, although the decline has been much less than on sheep. On to-day's market a few bunches of fancy native lambs sold up to \$7.75, but there were not many good enough to bring this price, and best westerns reached \$7.40. Good to choice native wethers are quotable at \$5.00 to \$5.35. A good to choice class of western feeding wethers can be bought at \$4.70 to \$4.85, fair to good kind at \$4.50 to \$4.65, feeding ewes at \$3.25 to \$3.75, while choice two- and three-year-old breeding ewes are selling up to \$5.10 to \$5.35, there being an exceptionally strong demand for that class of stock. Good to choice feeding yearlings are quotable at \$4.25 to \$4.60, best feeding lambs at \$6.40 to \$6.50, and fair to good at \$6.00 to \$6.30.

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SELLING STOCK BY CORRESPONDENCE

The United States is a country of such vast extent, and the farming communities have expanded so greatly in the past half century, that there is scarcely a place in the entire country which does not afford at least a small market for improved live stock.

Several factors, such as the great distances between different points, the growing belief in the value of pure-bred animals for improving common stocks and the great increase in the number and circulation of the different agricultural journals, have contributed toward the establishment and building up of a great mail order business in pure-bred live stock.

While in a business of this kind some mistakes would naturally occur and consequent dissatisfaction result on the part of one or both parties, the business as a whole has been fairly satisfactory to both buyer and seller.

The man who embarks in this business can expect permanent success only by giving to his customer the square deal in its fullest sense.

He must have first-class stock to start with, and must then bring this to the attention of the largest possible number of buyers by means of liberal and judicious advertising, says C. R. Moore in Farm and Stock.

The seller must be careful to give a fair and honest description of his animals, and to give fair values for

cash received.

The breeder should endeavor to send his animals out in good condition, as much of his success will depend on the first impression they make on the mind of the buyer.

Animals in transit naturally shrink and appear less attractive than when leaving the farm, and the buyer ought to make due allowance for this fact.

A newly-purchased animal should be allowed to rest and expand into its natural shape and appearance before it is rejected or approved.

In shipping stock requiring to be crated it is best to make the crates light and strong and as neat appearing as possible.

Crates should be no larger than is necessary for the comfort of the animal, but care should be taken not to make them too small, causing the animal to be cramped.

Some free advertising may be had by painting the shipper's address on one side of the crate, or the breeder's card may be tacked on the crate.

The breeder who does a large mail order business can save much writing by printing a general description of his herd and his methods of handling it, on circulars of a size to fit his envelopes, or he may have this printed matter on the back of his letterheads.

Some information which might be given in this circular would be the prize record of the herd, a table of

BLOODED STOCK for October

freight rates to different stations within the breeder's territory, and also approximate weights of animals at different ages.

Some buyers hesitate to buy an animal for fear the transportation charges will greatly increase the cost of the animal.

This difficulty can often be overcome by the seller making a price for the animal delivered, charges prepaid, to its destination, as the breeder can easily figure about what the charges will be, when quoting the price.

But in whatever manner the animal is sold the seller should remember that merely making the sale is not the most important point.

His reputation is at stake, and he should make sure that he is sending out animals which will favorably advertise his herd, and lay the foundation for future sales.

After all, the highest success in this business, as in all honorable businesses, is largely on the man behind the business, yet we can all profit at times by the application of more business-like methods, and this seems especially true of the mail order stock trade.

To be a real success at this work a man must needs be an honorable gentleman, but he must be more than this: he must be a real, energetic, up-to-date "pusher."

FEEDING WORK HORSES

In a bulletin recently published by the Wisconsin Experiment Station there appears a contribution on the above subject from J. Z. McLay, of Janesville, Wis. Among other things Mr. McLay says that approximately 10 pounds of oats, five pounds of corn and three pounds of bran, divided into three equal feeds, make a day's ration that can not be improved on for the work horse. The relative amount of corn can well be increased during the winter months, and for sake of variety it may be omitted at the morning meal and fed at noon. The weight fed at each meal should be kept about the same and for the evening meal crushed oats should, when possible, be substituted for the whole grain, along with the bran and a few handfuls of cut hay, fed wet and salted enough to render it palatable. Horses soon become very fond of this food and this alone aids di-

gestion. Sixteen pounds would be a fair amount of hay per day, the larger portion, of course, being consumed at night. Would prefer clover hay if in perfect condition. The reason clover hay is in bad repute for feeding work horses, we think, is because horses are allowed altogether too much of it, they being fond of it. Some advocate the omitting of the evening meal entirely, claiming that the grain fed is forced along the digestive tract too fast to be properly assimilated. While this might do very well with horses on light work, we would scarcely have the heart to withhold the grain ration entirely, but would certainly decrease it. While some well-known authorities advise the using of more barley as a ration, we are satisfied that it is of so little value as not to be worth considering. Fed in any form in considerable quantities, we have found it more irritating to the blood than corn

and seemingly to have an especially irritating effect on the skin, and when fed unground exceedingly liable to cause intestinal irritation. The only way we would allow it fed would be on Saturday nights, well boiled and mixed with an equal bulk of bran while hot, and this only during the winter months, when grass is not available. As to the feeding of idle work horses, it would be well if we would dispose of this subject by saying there should never be any, for this undoubtedly is the hardest treatment the work horse gets—the occasional rest when kept absolutely idle, tied to a manger, with all the fodder before him he can consume. Never allow the idle horse to remain in the stable, but see to it that he has a pasture or yard to exercise in part of every day, winter and summer, of course materially cutting down the amount of grain and using more succulent food, if possible.

Mange in hogs is not difficult to cure and seldom causes death. It is caused by a parasite under the surface of the skin, which produces irritation and later a scab. This is contagious. The best treatment is to wash the pigs in soft water and soap, then rub in dry sulphur. Repeat in a week. A third treatment is seldom necessary.

HORSE SHOWS.

Louisville Horse Show—October 1-6.
St. Louis Horse Show—Oct. 8-12.
Kansas City Horse Show—Oct. 15-21.
Chicago Horse Show—Oct. 29-Nov. 3.
National Horse Show, New York—Nov. 19-24.

Receipts at the Chicago horse market for eight months total 92,662, and shipments 79,048, against 92,505 received and 79,639 shipped to outside points the first eight months last year. Local consumption reached 13,614 for the first eight months the current year against 12,866 for the corresponding period in 1905, the gain aggregating 948 head. The increased local use of horses in opposition to the strenuous efforts of the

BLOODED STOCK for October.

SALE DATES

Poland-Chinas.

Oct. 15—A. J. Bunn, Kent, Ia.
Oct. 16—J. H. Wintermute, Blocton, Ia.
Oct. 16—Chas. E. Ogg, Auburn, Ill.
Oct. 17—J. H. Harvey & Son, Maryville, Mo.
Oct. 17—Williams Bros., Villisca, Ia.
Oct. 17—Ferd. Friedly, Verdon, Neb.
Oct. 17—W. A. Pruitt, Asherville, Ks.
Oct. 17—J. L. Ewart, Grant City, Mo.
Oct. 18—W. A. Davidson, Simpson, Kan.
Oct. 18—P. C. Miller, Conway, Ia.
Oct. 19—Ed. Blauer, Mt. Ayr, Ia.
Oct. 20—W. R. Dowling, Norcat, Kan.
Oct. 20—H. C. Whitrock and Wm. Reischick, Falls City, Neb.
Oct. 22—C. J. Whistler, Lafayette, Ind.
Oct. 23—C. W. Travis, Lafayette, Ind.
Oct. 23—J. M. Frazier & Sons, Fort Crook, Neb.
Oct. 24—M. Saylor & Sons, New Market, Ind.
Oct. 24—W. O. Canada & Son, Anderson, Ind.
Oct. 24—C. Lionberger, Humboldt, Neb.
Oct. 24—F. L. Rood, Clearfield, Ia.
Oct. 24—J. L. Miller & Sons, Brooklyn, Ia.
Oct. 24—T. F. Walker, Alexandria, Neb.
Oct. 24—F. A. Dawley, Waldo, Kan.
Oct. 25—D. W. Bingman, Clay Center, Kan.
Oct. 25—Jno. R. Triggs, Dawson, Neb.
Oct. 25—D. O. Miller, Eldora, Ia.
Oct. 27—J. C. Meese, Comstock, Neb.
Oct. 29—Jno. Sullivan, Peru, Ind.
Oct. 30—J. M. Baker, Narka, Kan.
Oct. 30—W. L. McNutt, Ord, Neb. (Sale at Grand Island, Neb.)
Oct. 30—G. B. Lobb & Son, Clay Center, Neb.
Oct. 30—Leon Calhoun, Potter, Kan. (Sale at Atchison, Kan.)
Duroc Jerseys.
Oct. 2—S. L. Moore, Cyclone, Ind.
Oct. 2—Joshua Rothrock, Centerton, Ind.
Oct. 4—H. A. Sexsmith, Greenfield, Ia.
Oct. 4—J. R. Wooden, Hall, Ind.
Oct. 4—J. W. Pyles, Scircleville, Ind.
Oct. 5—Arch Brown & Sons, Waterloo, Neb.
Oct. 5—F. A. Strong, Orient, Ia.
Oct. 5—Edgar Phillips, Onward, Ind.
Oct. 5—C. E. Kimm, Blairtown, Ia.
Nov. 1—Orville O. Jones, York, Neb.
Nov. 1—Carl Jensen & Son, Belleville, Kan.
Nov. 2—A. Glenn, Shepardsville, Ky.
Nov. 2—T. A. Gierens, Arlington, Neb.
Nov. 7—J. J. Ward & Son, Belleville, Kan.
Nov. 7—W. J. Crow, Webb, Ia.
Nov. 7—H. J. Hemmerling, Dike, Ia.
Nov. 8—T. P. Sheehy, Hume, Mo.
Nov. 8—L. B. Williams and T. W. Haviland, Corning, Ia.
Nov. 8—A. W. Holland, New London, Ia.
Nov. 10—O. W. Maddock, St. Joseph, Ill.
Nov. 12—O. A. Jewett, Co., den, Ill.
Nov. 13—H. Read, Frankfort, Kan.
Nov. 14—E. R. Barrett, Cadams, Neb.
Nov. 15—J. C. Hanna, Burlington, Ia.
Nov. 16—Belshaw Bros., Colchester, Ill.
Nov. 16—G. M. Hebbard, Peck, Kan.
Nov. 17—C. G. Mills, Pleasant Hill,

Mo.
Nov. 19—C. E. Tennant, New Hampton, Mo.
Nov. 20—W. G. Griffith, McNabb, Ill.
Nov. 20—R. E. Maupin, Pattonburg, Mo.
Nov. 21—Cotta & Mathis, Farmington, Ill.
Nov. 21—A. N. Waechter & Son, Hebron, Neb.
Nov. 21—Ira Garrison, Rushville, Ill.
Nov. 21—F. D. Fulkerson, Brimson, Mo.
Nov. 22—R. R. Stafford, Miner, Ill.
Nov. 22—Sensintaffar Bros., Brookfield, Mo.
Nov. 23—C. N. Sutter, Miner, Ill.
Nov. 24—W. R. Louch, Gardner, Ill.
Nov. 27—F. L. Downs, Webster City, Ia.
Nov. 28—W. S. Babcock, Rockwell City, Ia.
Nov. 30—U. S. Ison, Butler, Mo.
Dec. 1—C. E. Ogg, Auburn, Ill.
Dec. 4—Dr. T. B. Spalding, Decatur, Ill.
Dec. 7—A. Glenn, Chicago, Ill.
Dec. 14—Lemon Ford, Minneapolis, Kan.
Dec. 20—Ware & Win, Douglas, Ill.
Feb. 6—Shannon & Book Bros., Storm Lake, Ia.

Duroc Jerseys.

Oct. 17—J. A. Shelton, Manila, Ind.
Oct. 17—Hoover & Athens, Markle, Ind.
Oct. 17—W. A. Kirkpatrick, Lincoln, Neb.
Oct. 17—Z. I. Grout, Tingley, Ia.
Oct. 17—T. H. Isaac, Red Oak, Ia.
Oct. 17—John Black, Randolph, Neb.
Oct. 18—Hurlbutt & Rassmussen, Owaneco, Ill.
Oct. 18—Jacob Somsel, Galveston, Ind.
Oct. 18—C. A. Wright, Rosendale, Mo.
Oct. 18—Gilbert Van Patten, Sutton, Neb.
Oct. 18—Dewey & White, Shannon City, Ia.
Oct. 18—Ott Utter, Connorsville, Ind.
Oct. 18—B. R. Miller, Randolph, Neb.
Oct. 18—J. O. Reece, Eldora, Ia.
Oct. 19—Geo. R. Manifold, Shannon City, Ia.
Oct. 19—Carl Scott, Muncie, Ind.
Oct. 19—Geo. Briggs & Son, Clay Center, Neb.
Oct. 19—W. C. Holmes, Osmond, Neb.
Oct. 20—H. E. Watson, Edinburg, Ind.
Oct. 20—H. G. Warren, Inland, Neb.
Oct. 20—Fred Snyder, Galveston, Ind.
Oct. 20—M. Mihills, Norfolk, Neb.
Oct. 22—M. W. Greer & Son, Rushville, Ill.
Oct. 22—C. H. Masten, Stilesville, Ind.
Oct. 22—T. F. Shetterly, Lapel, sale at Noblesville, Ind.
Oct. 23—Perry Barker, Thorntown, Ind.
Oct. 23—H. S. Sheller & Son, Eldora, Ia.
Oct. 23—T. E. Laurie, Jacksonville, Ill.
Oct. 24—Colbert & Stroud, Warren, Ind.
Oct. 24—O. S. Gilbert, Conrad, Ia.
Oct. 24—Geo. W. Seckman, Ripley, Ill.
Oct. 25—Zionville Combination, Zionville, Ind.
Oct. 25—Manlove Bros., Bowen, Ill.
Oct. 25—L. P. Hovious, Cromwell, Ia.
Oct. 25—Balmat & Son, Mason City, Ia.

Oct. 25—Thomas & Hogsett, Golden, Ill.
Oct. 26—T. C. Kennedy, Thorntown, Ind.
Oct. 29—M. P. Cannon, New Castle, Ind.
Oct. 26—B. C. Marts, Polk City, Ia.
Oct. 26—Manlove Bros. & Griffiths, Bowen, Ill.
Oct. 27—A. P. Alsin, Boone, Ia.
Oct. 27—A. J. Stevenson, Mt. Ayr, Ia.
Oct. 27—Cutler, Reil & Cooper, Carthage, Ill.
Oct. 30—John Holste, Massena, Ia.
Oct. 30—McNeil Bros., Bowen, Ill.
Oct. 30—Higgins & Fisher, Shelbyville, Ind.
Oct. 31—Fagan, Browning, Hess & McCabe, Ripley, Ill.
Oct. 31—C. B. Lockhart, Matinsville, Ind.
Oct. 31—C. W. Mathes, Bridgewater, Ia.
Nov. 1—J. E. Svope, Frankfort, Ind.
Nov. 1—E. D. Harris, Fontanelle, Ia.
Nov. 1—Ed. A. Baxter, Pawnee, Ill.
Nov. 2—J. S. Lovejoy, Falmouth, Ind.
Nov. 2—J. S. Lovejoy, Falmouth, Ind.
Nov. 2—Fred Kraschel, Macon, Ill.
Nov. 3—J. Coy Roach, Girard, Ill.
Nov. 3—Ernst L. Humbert, Corning, Ia.
Nov. 3—Nash & Kimmons, Pickering, Mo. (Sale at Maryville.)
Nov. 6—Geo. M. McMurry, Maryville, Mo.
Nov. 6—F. M. Smith, Panora, Ia.
Nov. 7—Thos. Johnson, Columbus, O.
Nov. 7—H. B. Ayres, Eldora, Ia.
Nov. 8—S. S. Puckett, Yellow Springs, O.
Nov. 8—W. A. Staples & Son, Glidden, Ia.
Nov. 12—Geo. M. McMurry, Maryville, Mo.
Nov. 12—Geo. M. McMurry, Maryville, Mo.
Nov. 13—T. J. Hamilton, North Bend, Neb.
Nov. 13—C. C. Cotton, Manilla, Ind.
Nov. 13—T. J. Hamilton, North Bend, Neb.
Nov. 14—Wm. M. Finch, Portland, Ind.
Nov. 14—A. A. Lindley, Westfield, Ind.
Nov. 14—Stansell & Matern, McNabb, Ill.
Nov. 15—J. B. Gillette, Pierceton, Ind.
Nov. 22—S. R. Quick & Son, Gosport, Ind.
Nov. 27—E. A. Olive, Scranton, Ia.
Jan. 15—S. G. Collicott, Lake City, Ia.
Jan. 15—A. L. Bergsten, Mount Union, Ia.
Jan. 16—W. W. Wheeler, Harlan, Ia.
Jan. 17—W. H. Hindson, Lohrville, Ia.
Jan. 27—McNeil Bros., Bowen, Ill.
Jan. 23—J. A. Smith, Sciota, Ill.
Jan. 23—G. W. Baker & Sons, Pawnee, Ill.
Jan. 24—Stansell & Matern, McNabb, Ill.
Jan. 24—Reil & Cooper, Ferris, Ill.
Jan. 25—N. B. Cutler, Carthage, Ill.
Jan. 25—F. E. Garrett, Lohrville, Ia.
Jan. 25—E. M. Castle & Son, Joy, Ill.
Jan. 26—Dr. J. A. Downs, Glidden, Ia.
Jan. 29—H. B. Griffiths, Bowen, Ill.
Jan. 30—Manlove Bros. & Morris, Bowen, Ill.
Chester Whites.
Oct. 17—Brooks Bros., Kingman, Ind.
Oct. 23—E. C. Johnson, West Lebanon, Ind.
Nov. 2—A. J. Foland, Frankton, Ind.

Directory of Breeders' Associations

The following list comprises the name of every live stock breeders' association in the United States, of which we have record. The name and address of secretary will also be found in every case. If any associations of this kind are not listed, we ask that secretaries notify us at once, and also notify us at once as to any change in names and addresses. It will be the intention to keep this list up to date, and we ask for the co-operation of secretaries to that end.

Cattle Breeders.

American Aberdeen-Angus Breeders' Association—Thomas McFarlane, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Branch Association of the North Holland Herd Book—N. F. Sluiter, Brooklyn, N. Y., Secretary.
American Devon Cattle Club—L. P. Sisson, Newark, O., Secretary.
American Galloway Breeders' Association—Chas. Gray, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Guernsey Cattle Club—W. F. Caldwell, Peterboro, N. H., Secretary.
American Hereford Breeders' Association—C. R. Thomas, Stock Yards, Kansas City, Mo., Secretary.
American Jersey Cattle Club—J. J. Hemingway, New York, Secretary.
American Noarmandy Herd Book Association—E. G. Kramer, New York, Secretary.
American Polled Durham Breeders' Association—Fletcher S. Hines, Indianapolis, Ind., Secretary.
American Simmenthal Herd Book Association—E. G. Kramer, New York, Secretary.
American Short-Horn Breeders' Association—John W. Groves, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Sussex Breeders' Association—Overton Lea, Nashville, Tenn., Secretary.
Ayrshire Breeders' Association—C. M. Winslow, Brandon, Vt., Secretary.
Breeders' Association of French-Canadian Cattle of the United States—W. J. McMurdy, Binghamton, N. Y., Secretary.
Brown Swiss Cattle Breeders' Association—N. S. Fish, Groton, Conn., Secretary.
Dutch Belted Cattle Association of America—H. B. Richards, Easton, Pa., Secretary.
Holstein-Friesian Association of America—F. L. Houghton, Brattleboro, Vt., Secretary.
Maine State Jersey Cattle Association—N. R. Pike, Winthrop, Maine, Secretary.
National Polled Hereford Breeders' Association—A. E. White, Chicago, Secretary, 5629 Madison ave.
Red Polled Cattle Club of America (Incorporated)—Harley A. Martin, Gotham, Wisconsin, Secretary.

Horse Breeders.

American Association of Importers and Breeders of Belgian Draft Horses—J. D. Connor, Jr., Wabash, Indiana, Secretary.
American Breeders' Association of Jacks and Jennets—J. W. Jones, Columbia, Tenn., Secretary.
American Clydesdale Association—R. B. Ogilvie, Union Stock Yards, Chicago, Secretary.
American Hackney Horse Society—A. H. Godfrey, New York, Secretary.
Percheron Society of America—Geo. W. Stubblefield, Union Stock Yards, Chicago, Secretary.
American Saddle Horse Breeders' Association—I. B. Nall, Louisville, Ky., Secretary.
American Shetland Pony Club—Mortimer Levering, Lafayette, Indiana, Secretary.
American Shire Horse Breeders' Association—Charles Burgess, Wenona, Ill., Secretary.
American Stud Book (Thoroughbreds)—James E. Wheeler, N. Y., Registrar.
American Trotting Register Co.—W. H. Knight, Chicago, Secretary.
American Suffolk Horse Association—Alexander Galbraith, Janesville, Wis., Secretary.
Cleveland Bay Society of America—R. P. Stericker, West Orange, N. J., Secretary.
French Coach Horse Society of America—Duncan E. Willett, 2112 Michigan ave., Chicago, Secretary.

German Hanoverian and Oldenburg Coach Horse Breeders' Association—J. Crouch, Lafayette, Ind., Secretary.
Morgan Horse Register—Joseph Battel, Middlebury, Vt., Editor.
National French Draft Horse Association—C. E. Stubbs, Fairfield, Iowa, Secretary.
Oldenburg Coach Horse Association of America—C. E. Stubbs, Fairfield, Iowa, Secretary.

Sheep Breeders.

American Angora Goat Breeders' Association—John W. Fulton, Kansas City, Mo., Secretary.
American Cheviot Sheep Society—F. E. Dawley, Fayetteville, N. Y., Secretary.
American Cotswold Association—Frank W. Harding, Waukesha, Wis., Secretary.
American Leicester Breeders' Association—A. J. Temple, Cameron, Ill., Secretary.
American Milch Goat Record Association—W. A. Shafor, Hamilton, O., Secretary.
American Oxford Down Association—W. A. Shafor, Hamilton, O., Secretary.
American Rambouillet Sheep-Breeders' Association—Dwight Lincoln, Milford Center, O., Secretary.
American Shropshire Registry Association—Mortimer Levering, Lafayette, Ind., Secretary.
American Southdown Breeders' Association—Frank S. Springer, Springfield, Ill., Secretary.
American Suffolk Flock Registry Association—George W. Franklin, Des Moines, Iowa, Secretary.
American Tunis Sheep-Breeders' Association—Charles Roundtree, Crawfordville, Ind., Secretary.
Black-Top Spanish Merino Sheep-Breeders' Publishing Association—R. P. Berry, Clokey, Pa., Secretary.
Continental Dorset Club—Joseph E. Wing, Mechanicsburg, O., Secretary.
Dorset Horn Breeders' Association of America—M. A. Cooper, Washington, Pa., Secretary.
Franco-American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.
Hampshire Down Breeders' Association of America—C. A. Tyler, Nottawa, Mich., Secretary.
Improved Black-Top Delaine Merino Sheep-Breeders' Association—O. M. Robertson, Eaton Rapids, Mich., Secretary.
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Standard American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.
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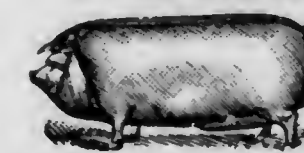
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International Consolidated Record Association

A. T. ANGELL, President

PENN YAN, N. Y



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M. W. SAVAGE, Prop. of
International Stock Food Co.
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THE VALUE OF A TRIED SIRE.

We wish that we might impress upon readers the value of a tried sire, over a young and untried sire. We are prompted to speak of this matter because it is an almost unanimous policy on the part of buyers, especially the less experienced, to buy the young or untried bull or boar, says Nebraska Farmer.

We do not know all of the motives that prompt men to do this, though a few of them are evident. We suppose that the buyer prefers the young sire because of the entire years of usefulness being before him. Others say that the mature sire is too heavy for young females, and others seem to have an aversion to mature and tried sires because they feel that the seller is disposing of them through some fault.

All of this is wrong. In the first place, a bull that is four or five years old or even seven or eight years old may yet be a sure and reliable sire at his twelfth year, and even older. Furthermore, these mature bulls are invariably sold under a positive guarantee of sure producers. Thus the mature sire will be a breeder for many years beyond the average age

at which such animals are sold. Second, the size of the mature bull as refers to breeding young females is a fair consideration only in part. In cattle this condition is rarely encountered if the heifers are not bred too young and are as growthy as they should be according to age. In hogs it is only applicable when the boar is in high condition and a breeding crate is not used. And thirdly, the man who feels that mature sires are offered for sale only through some fault is a natural skeptic in his belief of the purity or righteousness of any man's motives, and is hampered and impeded in his natural progress by his narrow ideas.

That the average tried sire is sold away below his value is without question, and is further evidence that the spirit of speculation in people is one of the greatest factors in the failures of men. We do not know what better evidence of worth or value a man could ask in a sire than to witness his achievements as a sire. It is not like buying a "pig-in-a-poke" to buy a tried sire, while in buying the young and untried sire one's operations are only guided by ancestral lineage, which is very often lost sight of in judging an animal whose rotund form

is more of fat than of blood lines that will insure a propensity to transmit this characteristic, and others of equal importance. One of the most popular and common errors committed by farmers and stockmen, and breeders as well, is the tendency to look upon the animal in question without reference to the individuality and excellence of his ancestors, and his own ability as a sire when proven by a crop or two of his get.

In the forthcoming sales of purebred cattle this season we know of several mature and tried bulls to be offered, among them being at least one of the greatest sires and individuals of his breed in the West, and we feel perfectly confident that not a single one of these bulls will sell at his worth, simply because of some of the senseless reasons enumerated in the preceding lines. We trust that breeders first of all will get away from the folly of buying untried sires when they may easily and usually at an equal expenditure of money procure a sire that has been tried and has proven his worth. The breeder should proceed in all forward movements in live stock affairs, and certainly this is one of the most needed reforms in breeding policies.

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BLOODED STOCK

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The Prevention of Transmissible Diseases of Swine

The heavy loss from disease in hogs is largely due to transmissible diseases. The organisms that produce this class of disease usually enter the body in the feed and inspired air. Hence, muddy or dusty yards, especially if over-crowded and filthy, filthy feeding floors, troughs and hog houses are largely responsible for the prevalence of hog cholera, etc. As young hogs are less able to resist these diseases than healthy, mature animals, the necessity of using preventive measures at this season of the year is of double importance.

During the spring and summer wallow holes are formed in the yards and pastures. In case the hogs run in a large lot or pasture during the summer, it is often considered unnecessary to clean and disinfect the small yards and hog houses and they become filthy and dusty. Muddy yards are especially objectionable, as they soon become filthy.

If necessary, the sanitary conditions of the yards can be improved by draining them, keeping the wallow holes filled in and taking the hogs out for a few months every year. The unused lots can be cleaned and put to good use by plowing and sowing them to rape, oats, cow peas, etc.

In no place on the farm are disinfectants so necessary as in the hog houses and yards. Whitewash should be used about the houses at least once during the year. Every two or three weeks the houses, feeding floor, troughs, etc., should be sprayed with

a disinfectant. The tar disinfectants are the most convenient to use. These should be used in not less than two per cent. water solutions. An occasional spraying or dipping of the hogs in a one per cent. water solution should be practiced.

Young hogs should not be given crowded quarters. In order to keep them in a healthy condition, a proper diet should be fed. Healthy individual power to resist disease, and this plays no small part in preventing it.

The entrance of disease producing germs from outside sources should be carefully guarded against, especially if hog cholera is present in the neighborhood. The danger of carrying germs in the mud and filth that may stick to the shoes of a person who has walked through yards where hogs are dying of "cholera" should be recognized. Dogs, horses, cattle, stray hogs and wagons may also act as carriers of disease. The opportunity for crows, buzzards and dogs to distribute the disease is not great in section of the country where the carcasses of the dead hogs are disposed of by burying. Hogs from other herds should be placed in quarantine for three weeks before allowing them to mix with the herd.

Keeping the hogs under the best sanitary conditions possible, and using the necessary precautions in preventing infection from the outside, is the most satisfactory method of avoiding loss from this class of disease.

R. A. Craig, Veterinarian,
Purdue Exp. Station, Ind.

Feeding Soaked and Unsoaked Grain to Hogs

The question of the condition of grain for hogs is one that affects the rate and economy of gains to a considerable extent. In the test herewith reported, grain soaked for 12 hours was compared with unsoaked grain, with 38 head of hogs for a period of 57 days.

The 38 hogs were divided into two groups of 19 each. The grain fed was corn meal with red dog flour to furnish protein. For the first 37 days equal parts of these two feeds were used, and the remainder of the period two parts of corn meal and one part of red dog were substituted. The feed for group 1 was soaked for 12 hours, or from one feed to the next. The feed for group 2 was fed in the form of slop made at the time of feeding. The hogs were fed all they would clean up at all times during the experiment. The average initial weight of group 1 was 54.78 pounds, and that of group 2, 53.1 pounds.

The feeding began on April 17th and continued until June 13th. During the first period, group 1 made an average gain of 32 pounds, as against 30 pounds for group 2. During the remainder of the feeding period, the gains of group 1 were much in ex-

cess of group 2, amounting to 25 to 40 per cent. more. The average daily gain for the whole period with group 1 was 1.28 pounds; and for group 2, .80 pounds; giving an average of .39 of a pound per head per day more for group 1 than for group 2. As a result of this difference group 1 made a profit, where group 2 showed a loss. The corn used was valued at \$20.00 per ton, and the red dog flour at \$23.75.

The cost of 100 pounds of gain at the above value for grain was \$4.23 with group 1, and \$5.28 with group 2. The cost per 100 pounds of gain with group 1 was \$1.05 less than with group 2. The profit per head with group 1 was 56 cents, making a total profit for the 19 pigs of \$10.64. While with group 2 there was a loss of 14 cents per head, or a loss of \$2.66 for the group.

While these results cover but one test, they are in accord with work done elsewhere, and indicate that soaking feed for growing pigs will often be a desirable practice on Virginia farms.

Experiment Station, Blacksburg, Va.
John R. Fain, Agriculturist,
Milton, P. Jarnagin,
Instructor in Animal Husbandry

BLOODED STOCK for November.

RATIONS FOR THE DAIRY.

Some rations which have been tested at the Station as well as by practical dairymen and found satisfactory are suggested in the following paragraphs. These rations will of necessity need to be modified to suit local conditions and should be fed in accordance with the individual needs of the dairy cow.

1. Corn silage 40 to 50 pounds, clover hay 5 pounds, timothy hay 5 pounds, wheat bran 3 pounds, corn meal 3 pounds, linseed or cotton seed meal 2 to 3 pounds.

2. Corn silage 40 to 50 pounds, clover hay 6 pounds, wheat bran 10 pounds, cotton seed meal 2 to 3 pounds.

3. Corn silage 30 to 40 pounds, fodder corn (with ears) 12 to 15 pounds, bran 4 pounds, corn meal 4 pounds, oats 4 pounds.

4. Corn silage 30 pounds, clover hay 6 to 8 pounds, fodder corn (with ears) 6 to 8 pounds, oat or wheat straw 2 pounds, bran 4 pounds, oats 4 pounds, cotton seed meal 1 pound.

5. Corn silage 30 to 40 pounds, cowpea hay 8 to 10 pounds, bran 5 pounds, corn meal 4 pounds, cotton seed meal 1 pound.

6. Corn fodder (with ears) 20 pounds, mixed hay 6 pounds, oats 4 pounds, shorts 4 pounds, cotton seed meal 3 pounds.

7. Timothy or mixed hay 10 pounds, soy beans, clover or cowpea hay 10 pounds, bran 5 pounds, oats 5 pounds, cotton seed meal 2 pounds.

8. Corn Silage 30 pounds, alfalfa or soy bean hay 12 to 15 pounds, wheat bran 4 pounds, corn meal 4 pounds, cotton seed meal 2 pounds.

9. Sorghum silage 30 pounds, alfalfa hay 12 to 15 pounds, wheat bran 5 pounds, cotton seed meal 2 pounds.

Andrew M. Soule, Director,
Exp. Station, Blacksburg, Va.

HOW PROF. WING DIPS SHEEP.

The New York State Experiment Station at Cornell University maintains a very excellent flock of sheep. It is often remarked that they are free from insects and parasitic pests. Many farmers in this part of the country know the troubles that ticks give sheep, and the loss that follows. Prof. Wing, in charge of the Department of Animal Husbandry, says: "We have used Zenoleum as a dip to rid our sheep of ticks with very satisfactory results." One gallon of Zenoleum will make enough dip for one hundred sheep and can be secured of the Zenner Disinfectant Company, 49 Lafayette Ave., Detroit, Mich. A gallon costs \$1.50, express paid.

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THE PERSONAL SIDE.

SOME THINGS ABOUT US AND OUR PLANS

TO OUR SUBSCRIBERS we wish to announce that in view of the change in the subscription rate of Blooded Stock to 50 cents per year, or three years for \$1.00, that inasmuch as we had not made any previous announcement of the change, for awhile we will make a reduction in this rate. In making this change it was not our desire to take an undue advantage of our subscribers but in view of the changed conditions and the improvement in our paper, in connection with the stand of the post-office department on second-class matter, we recognize that all publishers will be forced sooner or later to make a change and we felt that now was the time to make the change, just previous to the renewals of subscriptions.

IN CLUBS OF FOUR we have decided to accept renewals at 25 cents a year, or four years for \$1.00. This will give you Blooded Stock at one-half of our new rate. This is an opportunity for you to secure Blooded Stock at a very reduced figure and in view of this reduction, we would appreciate it if our old subscribers would secure four of their neighbors at 25 cents each and send us this club and we will advance their own subscription one year free. In the past a great number of our old subscribers have accepted this proposition and we would appreciate it if our old friends will give a hard push at this time when we are making the improvements. Let us have as many renewals and subscriptions before the beginning of the year as possible. Everyone should be sure that they receive every issue for 1907.

ABOUT OUR ADVERTISERS, we wish to call the attention of our readers to the fact that the advertisements found in Blooded Stock represent the very best firms to be found in the country. We do not think that anyone advertising in Blooded Stock would defraud any reader that we have. There are cases where judgments differ but we are positive that none of our advertisers will unfairly take advantage of our readers. We allow a great many advertisements to pass us by every year because we do not think them O. K. For this reason, we advise any of our subscribers who want any article advertised in Blooded Stock to be free about writing to our ad-

vertisers and at the same time to be sure to mention that they saw the advertisement in Blooded Stock. The advertisers who have used Blooded Stock have found by experience that our readers were straight business men and we feel that if you will just mention that you are a reader of Blooded Stock that you will get every possible attention. Please bear this in mind and report to us any trouble that you may have with our advertisers. We want everyone to get a square deal.

A NEW DEPARTMENT is being added to Blooded Stock. It is our purpose to make a special department for the reports of the live stock associations. In this department we trust to be able to furnish our readers with all the workings of the different live stock associations. This will give the news that cannot be found in any other paper. It has been the habit of these associations to use different papers to report their meetings through. This made it very inconvenient for breeders to keep track of what the different live stock associations were doing, but under the arrangements that we are making it will be possible for breeders to have a full report of all the associations in Blooded Stock. This alone will make Blooded Stock very valuable to the breeder.

NEW FEATURES will be added right along to Blooded Stock. It is our purpose to keep on improving until we have one of the finest papers printed. There will be some new attraction each issue. The reading matter to be found in Blooded Stock will be of the very highest class. We aim to give information that, if followed, will make any issue worth far more than the subscription price for years.

ANOTHER THING WE WANT is for every reader to see that the best farmers in his section takes Blooded Stock. You are acquainted with them and a word from you will help us very much. We want agents to look after subscriptions and attend public sales and farmers' institutes. For this work we will allow a liberal commission. Write us at once so that you will be ready.

Things to Think About

This Page Open to Any One Having Ideas to Discuss.

Spend a day traveling across the country and notice the condition in which you find the stables at this time of the year. Notice what provisions have been made to keep the stock protected from the cold. On many farms you will find that some one branch of the live stock is better cared for than the others. Some places it will be horses, others the cattle, others the sheep, others the swine, and others the poultry. Some one will be better housed and protected and even better fed than any of the other stock on the place.

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Have you ever thought over these matters? Why should such be the case? Do these people think that this favored line pays them better than any of the others that they keep? If so, why not dispose of the others, or if it pays them to take care of the one would it not be logical that it pay to give the same care to the other stock?

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Nearly every one of our readers has at one time or another been on farms where everything was kept in first-class condition. You felt certain that these farmers were making money and they were making it out of their stock because they were taking good care of it. Every little thing that would add to the comfort of the stock was done. These farmers do many little things that everyone can do, that do not cost but a few cents and a few minutes time, which add great comfort to the stock.

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Many will say that these men had everything, but that they had the money to do it with. You can do the same thing. If you cannot afford to house all your stock in first-class condition then sell it and save your feed. Keep only what you can keep in good comfortable quarters. Any man can keep a certain amount of stock and keep it well and what stock he cannot keep well he is keeping at a loss.

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A man's barn may be old but that will not hinder him from lathing the boards, using felt to keep out the wind or buying glass for the windows. A little cement and sand will stop up the cracks around the door frames and all these things he can do himself and need not hire any outside labor. We have seen stock stand shivering in stables that a man in two days or less time could, for \$5.00 or less money, have made warm and comfortable and this alone would have saved him a great amount of money in

the way of feed. The same amount of feed that he had used would have made him good returns but under the circumstances it required all the feed to keep an animal heat in his stock.

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We want you to watch these points. Study them out for yourself and see that you do not lose money by trying to keep something that you cannot protect. You will save money by making up your mind to sell the stock that you cannot care for properly. By using the money that you get out of this surplus stock and what you save in the way of feed will allow you to pay off some debt or else make some other improvement that will add to your profits.

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Too many farmers make the mistake of keeping too much live stock, more than they can care for and more than they can feed well. If they only had half as much and fed that half the same amount of feed that they had been feeding, then their stock would be kept in better condition so far as feed goes and they would receive good returns from the stock kept, whereas keeping as much as they do they keep it at a loss.

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You may have the best of blood and breeding in your herds, but if you do not feed and care for them properly the money spent for the good blood lines is partly lost.

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Stockmen should not leave the purchasing of their breeding animals off to the last minute. Look around early this season before the other fellow gets the best.

-\$-\$-\$-\$-\$-

Prof. A. P. Aitkins gives the following reasons why farm stock should have salt: First, in the blood of animals there is six or seven times more sodium than potassium; therefore, in order to keep animals in good health a definite amount of common salt must be assimilated. Second, the addition of salt to animal food increases the appetite, promotes the repair of tissue by its searching diffusion through the body, and stimulates the rapid using up of its waste products. Boussingault's experiments showed that salt increases muscular vigor and activity, and improves their general appearance and condition.

Things to Think About.

Articles Discussed Under This Head
Open to Any of Our Readers.

UNDER the head of "Things to Think About" in the October number were ideas that are worthy of the close attention of every farmer as well as the closer study by those who would make a success at breeding.

The writer does not know of any one thing that would be of as much value to the farmer as for him to be able to select his brood sows with a certain knowledge that they would be good milkers, thus assuring a good litter of pigs. When we read your remarks about making the start to get good milkers in the selection of the boar for breeding it opened up a new line of thought and the writer is certain that you have the key to success in the selection of the boar.

Selecting a boar that in every way fills the bill in make-up, possessing all the desired points that breeders are trying to get as near as possible, and from a sow that has proven to be a good suckler, having a finely developed udder, is the starting point. This pig should be from such a dam. You should be very particular that he has a well-developed, evenly placed, set of teats. Determine what a well-developed set of teats are by examining a number of pigs and notice how much larger and better placed they are on some than on others. Twelve well developed, evenly placed teats, is about the proper number. The larger these teats are the better, as they indicate a better developed udder, if the same pig had been a sow, and as you are a believer in "like begets like," so this principle holds good in the development of the teats and udder. This point should be plain to every one.

The next point in following up this idea is to be equally as careful to see that the sows are from good suckling dams and sired by a hog that possessed the same characteristics, and we are certain that the road to success to having good litters and good pigs is open.

After reading these ideas and getting them well fixed in my mind it was surprising how easy one can find these points when going to look the subject up. The more one looks the greater the wonder that one had never noticed them before and to put the idea into operation does not cost anything. After this your readers have no excuse

for ever having trouble on the score of having sows that are poor milkers.

At a sale I noticed some well-known breeders, who have a reputation of raising some great animals, examining some bull calves, and by their actions I decided that they were hunting the points that you had mentioned. I edged into the circle and listened and was fairly dumbfounded when one gentleman said that one of the bulls had a wonderful well developed milk vein and four magnificent developed teats, and if his dam was as good as the dam of the other calves, he was worth more money alone than all the rest of the bunch put together as they were all sired by the same bull. We found the calf was from a grand cow and when sold was the highest priced animal in the sale.

This discovery right on top of your calling attention has been a great thing to me. I cannot help thinking what has been lost in raising stock on small points that strutted around before my eyes for years and in the face of it all the secret and profit were sold year after year to others who bought my stock.

I never realized as much as now why some men who have reputations as being great breeders go into a herd and leave the finest looking animals many times, and it afterward develops that they had secured the greatest animal ever bred by the breeder and at a low figure, while the pick by the crowd only made a second rater. I would like to shake hands with you, Mr. Editor. Give us all such ideas you have, but your one lesson would be sufficient if you never gave another. Let every reader hunt up the October number and read your ideas on page 4 over again.

Jabez.

The American Royal Live Stock Exposition at Kansas City last month was a great success. The cattle departments were very full, and so were those of the horses, swine and the rest. The horse show was double that of last year, and three hundred pure bred hogs were on exhibit. It was altogether the greatest of the Royal series, both in the exhibits and the attendance.



Ten bred gilts owned by Lefever Bros., Oblong, Ill.

THE REARING OF A DAIRY CALF

TOO many farmers make a big mistake by supposing that almost any pure bred animal will do for for a beginning and that the finer qualities of improvement may be safely postponed until a later period in a herd's development. I believe the careful consideration of the first cross to be quite as essential in the upbuilding of a herd as any following step of improvement. And, while an animal may have been offered at a low price, with the explanation that it was not quite up to a breeder's standard, but plenty good enough to grade a herd, it would be well for the prospective buyer to be cautious enough to learn why such an animal should fall below the standard of a breeder.

If possible, let him personally inspect that animal, and if the owner leads out a runted, stunted fellow with a narrow chest, gaunted barrel, lack lustre eye and hide-bound, at the same time calling attention to what he thinks you are likely to deem as his most commendable virtue. "He's gentle." Look him over, and you will soon be convinced that he hasn't vitality enough to be anything but gentle.

The proper place for an animal of this kind is under ground. Don't touch him at any price; such an addition would not prove a betterment in any herd.

But, after all, a good beginning may make a disastrous ending if one permits himself to be swayed by each and every one who stands ready to give advice to a wavering beginner.

Perhaps he has made a commendable start in the right direction. The first bunch of calves are a credit to his efforts and he will be inspiringly satisfied, until some neighbor while inspecting the youngsters will call attention to his lack of judgment by remarking, "Yes, I see that you are on the right track in grading up a herd of pure bred cattle. It's a good idea, I'm going to do it myself some time when I get around to it. (Utterly unconscious of the fact that none of us are allotted more than 100 years to develop any kind of stock, and that time is our most valuable commodity.) "But what under the sun possessed you when you put that measly little Jersey at the head? Don't you know that when you come to sell your calves to the butcher you won't get anything for the carcass? Why, it just makes the buyer swear when they see a Jersey come to the stockyards."

"But,"—when he notes the discouraged look—you haven't gone far wrong. The Jerseys are rich milkers, there's no getting around that, and now, if you'll cross a Holstein, you'll get the large frame and more milk."

The beginner may recognize it as good counsel and a Holstein will replace the Jersey. Another year, and another neighbor will take it upon himself to criticize and suggest. He will deplore the quality of the milk while commending the increased size of the cow, and, as a remedy, will advocate a compromise by way of a Guernsey sire. And, what is the result? No one breed has been improved. The dairyman has made a mongrel of all, and worse, for with such indiscriminate breeding, the undesirable qualities of a breed are more frequently reproduced than the valuable traits.

When the sire has been carefully selected, look well to the dam. These mothers have a way of leaving an impression on their offspring; see that she has a good constitution; see that she is a persistent milker, not the cow that will give you a large flow of milk for a short time and then dwindle down and in a few months go dry, and board with you the remainder of the year. Such a cow is not a profitable dairy worker.

Select the cow that will give a reasonable flow of reasonably rich milk for at least ten months in the year, and if both sire and dam are in perfect health we now have a foundation stock worthy of our earnest thought, and more careful attention.

If the mother has received the proper care and food the little creature that comes to the herd will be a bright-eyed, lively little thing. When it fearlessly noses about you, don't give it a rude push and drive it from you. Remember, that in order to succeed, a dairyman and his working partners must be the best friends.

The first step in the calf's education is to teach it to drink. I have seen men, real nice men, who belonged to church and who would not swear, only under great provocation, who would plow all day rather than attempt teach a calf to drink.

I have seen such a man take a pail of milk, roll up his sleeves, set his teeth as though he were going to a dentist's chair and march out to that poor, little, inoffensive calf. Then he would put the pail down, grab it by the ears, throw one leg over its neck and then ram his head down to the bottom of the pail until the bubbles came up.

Is that the humane way to teach a calf to drink? It will kick and struggle. Why, of course; wouldn't you? Yes, you certainly would if your nostrils were down in the milk and you were drawing milk instead of air into your lungs. One should use a little sense.

Now, I will tell you how mother and the girl would accomplish this task. They would get the little one in a corner and pat and pet it, talking so tenderly all the time that it would never realize that it was being managed. Why, I have even seen women who could get a man in a corner and manage him so beautifully he never knew that he was being managed at all.

Well, a calf is seldom wiser than a man. A woman will dip her hands in the pail, with the finger tips showing a little above the milk, and while she is talking and stroking it, the head is pushed gently down until the lips touch the milk and grasp the fingers. So soon as it begins drinking the fingers are withdrawn. Perhaps the head may come up and the process is repeated.

A little time and patience is required, and as I have known them to drink after the first lesson; again, it may take several. But humane methods from the start will pay big dividends in the cow barn. Begin with the foundation. One cannot pet or love too much. It is an essential part of their training.

Until a calf is three weeks old, it should be fed three times daily, two quarts of clean, warm milk each time,—98 degrees is the proper temperature. At the end of the first week a small proportion of the milk may be skimmed, and by the end of the second or third week the entire amount may be skimmed.

One should not think because the milk is thin the calf would be able to take a greater amount. By skimming, the butterfat alone has been removed. There yet remains all the casein and other solids which will amply supply the bone and muscle-forming elements necessary for the development of a dairy animal. After three weeks, the six quarts of milk may be divided into two feeds a day.

In bringing the milk up to a proper temperature, the can should never be set directly on the stove for fear of the milk becoming scorched. Plunging the can in hot water is a better means of obtaining the right degree of heat.

It is not necessary to ever raise the quantity of milk, for as the calf grows older and requires more liquid, water may be added. However, a larger amount of milk may be given if a little is cautiously added from time to time.

From the day of its birth it may be given clean, bright hay. The hay should not be thrown in the pen where the calf may walk over it until it becomes soiled and unfit for food, but should be put in a rack where it will be kept fresh and clean. Another very important thing in raising a profitable dairy worker is plenty of sunlight and pure air. The calf pens should be arranged so that they may be flooded with sunlight.

They must also be kept dry and clean. A little fresh bedding scattered over a wet, filthy surface is not sufficient, for the moisture beneath will prove harmful in the extreme to the rugged constitution that should be the foremost object in calf raising.

At the end of the second week a little box may be placed in one corner of the pen in which a small quantity of whole oats or bran may be put. After the calf has finished its milk, a little of the grain rubbed on its nose will soon teach it to find the box.

We now have it in a thrifty condition and if care is exercised as to the temperature of the milk, the cleanliness of the pens, the sunlight and ventilation the calf is well started on the road to a course of future usefulness.

The fall and summer calves are left in the stable until after the first flush of grass is over. We do not want to put them out while there is too much succulence in the grass, and then if there is not enough pasture they should have a soiling crop. When a heifer is from five to six months old, take away the grain. Make her satisfied

with roughage, but give her enough roughage.

Be sure she has good, pure water. You may give her a little from the start. The old Connecticut rule is, sixty quarts of water a day for cow at flush of milk. The spring and summer calves are kept until September, then are put on pasture.

Now, if a heifer is thrifty and well and has grown naturally, you do not want to force her, just a steady, natural growth, she should become a producer at an age of from 22 to 30 months. I should prefer to have her about 23 months old. Three months before she is about to freshen give her extra care; begin and grain her gradually at first, then until she will take with profit all that she can eat readily. Begin to groom her in order to stimulate the circulation. You may go to hundreds of farms and the horses will be found slick, but the cattle will stand day in and day out in their stalls with never a brush or currycomb touched to them. And it is far more essential for our cows to be clean than our horses, because we are to eat the product of the cow.

This heifer should be put in a stall, should be made to feel her importance. Of course, she has never been curried with a milk stool, has never been touched up with a pitchfork. You have never done any of these things if you are going to have a first-class work. Make her think she is of some consequence.

HOG FEEDING BY ALLISON METHOD.

To those wishing to use cottonseed meal for hogs now, we recommend:

1. For animals on heavy feed, that not more than one-fourth the weight of the grain ration consists of cottonseed meal.
2. That this feeding continue not more than fifty days, or that the proportion of meal be reduced if feeding is to be continued longer.
3. That the meal be mixed with the other feed and all soured together.
4. That as much green feed as possible be furnished the hogs.
5. That a close watch be kept, and meal taken from any animals not eating or not gaining well.

Feeders who have had experience with the meal will probably be able to exceed these recommendations, which however, allow the use of enough meal to greatly improve a corn diet. One pound of cottonseed meal to five of

When this heifer is in the stall, brush her and groom her and pet her; handle the udder to familiarize her with the milking process and then, when she freshens, there will be no heart-rending "breaking in," there will be no kicking and stamping around in the stall.

She may look about and step about when she hears the milk falling into the pail, but, if you give her a kindly, reassuring word, in just a day or two she will stand chewing her cud like an old cow.

Now, I beg of you, go to the old country and bring back another method, that is, of milking three or more times a day. I have heard Americans say: "It is all I can do to milk twice a day." But, cannot you see that if you had left the calf with her, from time to time it would have relieved the udder?

You have bred her to give a large flow of milk; you have fed her for the same purpose, and now that she gives it, be humane enough to take it from her and not allow her to suffer.

The first milking season should be prolonged up to the second freshening, if possible. Before she freshens for the third time, let her go dry for two months, then when she freshens you have a cow that will, as a rule, prove a profitable dairy worker.—(Extract from an address by Mrs. A. F. Howie before the Connecticut Dairymen's Association.)

corn furnishes the nutrients in the most desirable proportions for fattening, while one or two of corn are more nearly correct for young growing stock. Of course other feeds are desirable for their influences not attributable to their composition, but it is not often that the adopted standards can be ignored in feeding any animals for profit.—From Texas Agricultural Experiment Station, Bulletin 78.

Milk from a sick cow is only good for one thing—to throw away.

The first few streams of milk drawn from the cow should not be put into the pail. Very often they contain dust and germs that have accumulated in the duct during the day.

The export trade in American butter is growing very rapidly. In 1904 and 1905 the amount reported was 10,000,000 pounds each year. In the fiscal year, ended June 30, 1906, it had increased to 27,360,537 pounds the value trebling in the two years.



Owner and Prince Barbara, 68604, head of Delaware herd of Polled-Angus, owned by Myers & Son, Bridgeville, Del.

Horse Raising for Farmers

WHEN the demand for an article greatly exceeds the supply, and prices have a decided upward tendency, then is the time to go in for the production of that article, writes a practical man in the Country Gentleman.

Some weeks ago, in the Chicago livestock market, fancy draft horses sold at a new high figure, one lot averaging \$350 apiece, Armour & Co. paying \$1100 for a pair of Percherons. Why should we eastern farmers sit quietly by and let the chaps in the central west take our good money, when with a little trouble we could keep it ourselves? There was a time when the East was noted for its horses, and supplied the West almost entirely, but to-day farms where good horses are raised are few and far between. The general opinion seems to be that there is no money to be made in raising horses. There isn't any money in raising poor horses, or in raising poor stock of any kind. About three months ago, in Maine, a fine draft Cydesdale filly, 22 months old, was sold for \$175. In New York City a fine coach horse sold for \$400 last month. The prices for good horses of all classes are higher than ever, and the limit has not been reached.

The first step in starting is to decide what kind of a horse best suits your location and what there is the most demand for. "As a general rule," said a well-known horseman, "the type of horse which sells best, as meeting most of the requirements for driving, working or riding, is a slightly modified and enlarged old-fashioned Morgan horse, with feet like iron, legs like steel, hair like silk, courage that never falters, and placidity that never degenerates into sluggishness. In color, perhaps bay; short



This great hog is owned by C. M. Griffin, Charleston, Ill.

back, with neck which has a little suggestion of the peacock's, and an eye that meets your gaze bravely; a collar seat which lovingly embraces the shoulders; a breast which protrudes like the prow of a schooner; legs wide enough apart to prevent their interfering and to give room for the inside leg muscles, strong enough firmly to attach the limbs to the body; so close ribbed that one will not continually be reminded of a slatted corn crib that can never be kept full, and yet not so close-ribbed as to prevent long action, for it is evident that a short-bodied, very close-ribbed horse must be short-gaited; that symmetrical development of hind legs, rump and levers which can neither be fully described nor illustrated, but the symmetry of which the trained eye takes in at a glance, and the judgment approves because the propeller end of this complex machine gives evidence that it will make things move in this work-a-day world."

The problem is how to go about raising such horses. Experience, worth having, is surely worth paying for; so we must expect to meet with some failures, but don't let anything down you once get started.

Don't breed old, worn-out mares; if you do, you can count on failing before you start. Better results will be had by not working the brood mare too hard, if you want good, healthy, vigorous colts, because overheating has a bad effect on the milk and will prove the ruin of the colt. Frequently good mares can be bought in cities at a moderate cost on account of sore feet, caused by the hard pavements. A few weeks in pasture, with their shoes off, will put them in good shape again.

A brood mare should be of good size and rather rangy. She will perhaps be a bit too long and coarse, but these defects may be corrected in the offspring through the sire. The eyes should be prominent, bright and well set; the head fine, neck rather thin, but well set on the shoulders, which should be rather thin and moderately oblique. The withers should be high rather than low; back (top line) may be long if the bottom line is correspondingly long, though a short back line and a long bottom line is best. The hind quarters should be broad and deep, with hips thrown well forward. A brood mare should be a little open-ribbed. Such a structure usually goes with

a well-set tail, a broad pelvis and well-developed mammary glands.

Good, clean, well-knit legs, a bit short rather than too long, according to the breed, placed under the body, rather than on the "corners" of the horse. If the feet are dark-colored, tough and close of texture, they will as a rule not only be good, but will indicate that the rest of the body is also tough and close-grained. Bay or brown is a good serviceable color, and the hair should be thick and soft.

In choosing the male, don't pick out one because he happens to be near at hand, but send the mare to a good breeder who has a stallion of the type you wish to raise. Do this even if he mare has to be shipped by rail. A better way, perhaps, would be to go to the city or town nearest to where the breeder lives, purchase a mare and take her out to the stud farm. Service fees usually run from \$25 to \$50. Be sure to select a stallion masculine in appearance; fine, large and smoother than the mare. Symmetry counts for a good deal in trying to breed up to a type.

If the mares are bred in the winter, they can be worked all summer, but should not be used on soft ground or muddy roads during the last two months with young. Care should also be taken not to drive them too fast or to overheat them. In this way colts may be raised every year, with little inconvenience. Mares will not breed so readily in the winter; but by increasing the feed, especially the grain ration, by regular exercise, blanketing and keeping the bowels free, conditions will be made similar to those which exist in the spring.

If more than one or two mares are to be bred, it will be economy of time to breed them as near together as possible, so that the colts will come together. The mares should be closely watched as the time for the birth of her young approaches. About one day prior to the birth of the foal, the waxy matter which closes the ends of the teats will loosen and allow the milk to escape. Be sure to give her a good roomy box stall, with a moderate supply of bedding. It will be safer to have a veterinarian on hand, unless you have had experience in such matters. Mares should be bred again nine days after foaling, if they are healthy and have not been injured in giving birth to their foal. They should be tried again within two weeks to eighteen days after service. Should the mare's milk not

be sufficient for the colt, cows' milk, modified with a little water and sugar, may be used at a temperature of from 98 to 100 degrees. The first milk after birth has a laxative tendency, while modified milk tends to constipate the foal; therefore the bottle-fed foal should be given a mild physic, of 2 to 4 oz. of castor oil or unboiled linseed oil, when necessary.

Brood mares, when nursing their colts, should be fed very much as cows are, for the production of milk. Plenty of carrots, ripe apples, potatoes and corn ensilage. The ration should be a narrow one if the stable is warm, but more corn should be given if the stable is cold. A good ration may be made up of bright mixed hay, 15 lb.; wheat bran, 4 lb.; oats, 5 lb.; carrots, potatoes and apples, 9 lb.

Colts should also receive a narrow ration when they begin to eat—that is ration made up largely of bone and muscle-building foods, such as oats and bran. Wean the youngsters when they are three or four months old, if the mares are with foal again; if not, they may nurse longer. When the colts are a few days old, the mares may be led out of the stall for a few moments, gradually increasing the time of separation until they can be worked for two or three hours at a time. Never allow colts to follow their mothers when at work; they are sure to be in the way and are apt to get hurt.

Give the boys a chance to bring up the youngsters; it

will create an interest for them, and as a rule, if they have a love for animals, they make good trainers. The cost of raising a colt to three years old amounts to about \$115, including service fee.

The question rises, should farmers try to raise good horses when they are already engaged in other branches of farming? Assuredly, even if they only raise enough for their own use. What greater pleasure can there be than driving behind a fine pair of horses of one's own raising? Besides, each new undertaking awakens new

interest, broadens the vision and adds one more pleasure to life.

Good books on horses are to be had for little money, and will prove a great help in starting. Surely it is high time we were looking to our laurels, for while we sleep our western neighbors are carrying off our very reasons for being. To say that we can't compete with our friends is to admit that we lack pluck, skill and perseverance, and to admit such things condemns us as unfit to be farmers—free and our own masters.

Breeding Thoroughbreds

JOHN E. Madden gives figures as result of his experience on the cost of raising thoroughbred race horses:

UNITED STATES DEPARTMENT AGRICULTURE.

Bureau of Animal Industry,

Washington, D. C., Sept. 25, 1906.

Mr. John E. Madden, Hamburg Place, Lexington, Ky.:

Dear Sir—As you are probably aware, I am collecting information concerning the comparative cost of raising horses for the market and for the race track. This information will be based on the statement of reliable breeders, and will, as far as possible, show the relative cost of raising roadsters, carriage horses, saddlers, standard breeds and thoroughbreds.

I would be greatly obliged if you could furnish me with a statement of the cost of raising a race horse up to the time he is placed in training, as shown by your experience.

This information is asked for simply because there is a dearth of it in our horse literature. The Department does not oppose the breeding for racing purposes, but indeed, believes that where farmers have light mares much benefit can be derived by the use of sound standard bred and thoroughbred sires of good conformation, size, quality and action. What we wish to know is whether such farmers should develop the offspring of such matings for the general market or for the race track.

Awaiting an early reply, I am very truly yours,

GEORGE M. ROMMEL,

Animal Husbandman.

Sheepshead Bay, L. I., October 10, 1906.

Mr. George M. Rommel, United States Department of Agriculture, Washington, D. C.:

Dear Sir—In reply to your letter of September 25, not having my books to refer to, I cannot possibly furnish you with all the details you may desire, but the following statement of cost of raising a thoroughbred to the age of 2 years at Hamburg Place is fairly correct:

First year.....	\$ 50
Second year.....	100
Keep of mare.....	50
Interest on cost of mare and allowance for barren years.....	50

Total	\$250
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My brood mares are select, and consequently high priced. Skilled labor only is employed and costly buildings used for shelter. The average farmer should be

able to raise thoroughbreds for about \$100 less than the above figures, and I add a statement which may be useful in furnishing you the information you seek:

Pasture at \$2 a month.....	\$16
Grain, with pasture at 10c a day.....	24
Cost of wintering at \$6 a month.....	66
Estimate for stallion service, keep of mare and labor.....	50

Total	\$156
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Actual cost in feed and pasture should not exceed \$106. There is much latitude in the price of stallion fees—say



Duroc-Jerseys owned by W. H. Robbins, Springfield, Ohio.

from a free service to \$100—that it is difficult to make a correct estimate of this item. Many farmers could use their brood mares and so offset the cost of keep. An average price for a brood mare might be put at \$200. Where one or two mares are kept no extra labor is hired, and I think \$50 would cover all expenses beyond the above \$156.

The demand for hunting and steeplechase horses is very much on the increase, and the farmer is the man to supply this want in breeding a good type of thoroughbreds.

Would call your

attention to a sale of brood mares. In 1903, being overstocked at Hamburg Place I disposed of 38 head, which brought a total of \$14,626, an average price of a little over \$340 per head. In 1904 I disposed of 42 head, which brought \$11,595—an average price of \$276 per head. Seventy-five per cent. of these mares were in foal. Many foals the mares were carrying sold at public auction, while yearlings, at from \$400 to \$2200.

Brood mares have not been bringing their value during the past few years. Farmers who are struggling to make a living from the raising of crops could with but little extra expense keep a few brood mares and realize handsomely from the produce.

In 1905 the 55 yearlings of Hamburg Place, at public auction, sold at an average price of \$1,000 per head.

Yours, very truly,

JOHN E. MADDEN.

If milk is kept at a temperature of 40 degrees, bacteria will not multiply in it. They will increase at 45 degrees, and at 65 degrees milk will swarm with them.

New milk should be averted as soon as possible after it is drawn, but this should never be done in the barn. A simple way is to pour the milk slowly from one pail to another several times. Bad odors are thus driven off and a fine butter flavor is preserved.

Swine Breeding and Keeping.

The Hog Better Than a Saving Bank to the Farmer

Practical Suggestions

I ALWAYS regret to hear a farmer or gardener say that he does not keep hogs because it does not pay. To me it seems an evidence of poor management and a neglect of one of the surest methods of money-making on the farm. The hog has been called the "poor man's saving bank," in which he puts during the season small sums expended for grain and from which at the end he can realize a considerable amount of pork which he may use for food or sell readily for a round sum of money.

To the farmer the hog is better than a savings bank because he will accept daily that which the bank would not, that which he could not sell in any market; skim-milk, waste, unmarketable fruit and vegetables from orchard and garden; even the weeds that he hoes up or mows down, the unripe ears of corn from the field and the scraps from the table, and will pay good prices for them in meat or money, besides leaving behind him that which has a money value to the farmer, a large amount of rich manure.

A mistake scarcely less than that of keeping no swine is that of keeping them in a state of semi-starvation for six or eight months and feeding them heavily on grain that when he kills them at a year or a year and a half old he may boast of the great weight they attained. It may be considered as proven by the hundreds of tests made at our experiment stations and by practical pork raisers that every pound of pork made after a hog is seven months old, or after it is heavy enough to weigh 300 pounds dressed, costs more for feed than it will sell for in the market. Many would place the limit for profitable feeding at six months old, when there should be from 225 to 300 lbs. of dressed meat to the animal if it has been properly cared for.

There is an exception to this of course, in the case of breed-stock, which pays for its keeping by the pigs produced and which may and properly should be kept for as many years as they do that work well. Not long since I read of a man who kept and bred one sow until she was 18 years old, and when she died buried her and erected a monument to her memory. As she was a pure-bred sow of long pedigree, a good prolific breeder and raised good pigs, he had sold thousands of dollars worth from her in that time. This may be an extreme case, but when a farmer has such a sow, even if not pure-bred, so that he can get fancy prices for pigs, there is an opportunity for an income from her each year far in excess of the cost of keeping her.

Different breeders favor different breeds, and each one thinks he has the best. Perhaps he has that which is the best for him under the conditions which govern him. In the western states the favorite breed is undoubtedly the Poland China, and they are usually grown to larger weights than I have named above, as may be seen by those which are brought here alive and slaughtered for Boston packers, but they are usually pasture fed on clover and grass during the summer, and often on nuts and acorns in the fall, so that the first six or eight months' feed is supposed to cost nothing, and when brought up to be grain-fed they fatten rapidly. Even there many prefer the Berkshire as fattening at an earlier age and making good pork at six months old.

In the eastern states the preference seems to be for the Yorkshires, which are usually divided into three classes—large, medium and small, the two last easily reaching the weights named at six or seven months old. A breed known as Chester White was very much like the Yorkshire, and a favorite, but it is not easy now to find them

pure-bred. The grades of this breed, if good, are desirable as sows to cross with Yorkshire boars.

I might mention other breeds that have been praised, but in which I see what I think to be faults—the Suffolk, a white breed with but few bristles and a thin skin which often blisters in a hot sun, and the Essex, a black breed. Both fatten readily when small and cannot easily be made very heavy. Neither of these has a reputation of being prolific breeders. It is said that the others I have named would be as likely to farrow 12 to 14 pigs as these would be to have six or seven. Then there is the Tamworth, a red breed, sometimes very highly recommended as the bacon hog because it carries more lean meat than fat. They are a near approach in all but color to the razor-back of the southern states, which may be kept to almost any age, and when as long as a rail are not much larger. Southern farmers say they keep them because "three niggers and a hound dog can't catch them" as they run in the woods. The Red Jersey I have seen, but they always looked to me like the product at first of a cross between a white breed and the original Berkshire and as such a little better than the latter.

It may be guessed from the above that my choice of a breed for farming in New England would be a medium Yorkshire, or, if not prejudiced of a white hog, the Poland China. But I would not insist upon the farmer keeping only pure-bred swine if he thinks the cost too high. A good sow not pure-bred, when mated with a pure-bred boar of either of these two breeds may produce pigs which will fatten as readily and make pork at as little cost as a pure-bred animal; but, like all grade animals, when the males are used for breeding purposes they cannot be relied upon to produce as good as they were. The sows can be bred back to their sire for two or three generations or to another boar of the same breed, and they will improve or be nearer the pure breed in each generation. I would

never cross two pure breeds together, as I should expect to get the faults of both and the good qualities of neither.

In choosing a young sow for breeding purposes one can scarcely do better than to be governed by the description given by F. D. Coburn in his *Swine Husbandry* of the sow at eight months old, when she is fit to be mated with the boar. "At this time," he says, "she should be of a form known as 'rangy'—that is, the opposite of compact, of a loose and open build, long, yet quite broad on the back, with a short neck and head, fine ear, heavy jaw—sure indication of an easy keeper—wide between the forelegs, deep sides and heavy hams well let down on the gambrel joint. She should be large and roomy (in some respects the opposite of the boar), from healthy stock, a greedy feeder and of great vitality, as indicated by a large girth back of the forelegs, and a robust appearance generally. Coarseness is allowable in the sow much more than in the boar, especially if she has great room for carrying a large litter, with indications of being a good suckler, as shown by having at least 12 prominent well developed teats.

If to this can be added the knowledge that she is of a family that have been prolific breeders and have suckled good litters with milk enough for them, and if she has during those first eight months been neither stinted in food nor overfed, but has been making a thrifty growth, she should be nearly a perfect sow and one that her owner should get two litters from each year for many years.

The pig farrowed in April will thus be old enough for mating in December, which would bring her due to far-



Prize winning Chester White sow owned by E. B. Ashbridge, Cloud, Pa.

row when a year old. Many sows would be capable of breeding much younger, even perhaps at three months, and some breeders mate them at less than eight months old, but to do so results usually in a litter of few numbers, of weak constitution, that do not grow as rapidly or fatten as well as those from more mature sows. If she brings up six to eight pigs in the first litter and they grow well she is a good one and ought to have a dozen in the next litter if well mated. Some go to the opposite extreme and wait until they are a year old, but with such a sow as described there is a chance of her taking on too much fat to breed well, though this is no worse than being kept too thin in flesh.

Most breeders prefer to have pigs dropped in April and in September, when the weather is neither too hot nor too cold, and when they can be fattened and killed at about seven months old, or while the weather is cool. If the pigs are weaned at eight weeks old this can easily be done, as she seldom carries her pigs over 16 weeks before farrowing, and sometimes the first litter not over 15 weeks.

In weaning a litter I like to take away two or three of the larger ones at a time, as I would if I were selling them and giving the first buyer the first choice, and leave the two smallest a few days after the rest, to prevent her breasts from caking. As the pigs will have begun to feed from the trough of their own when about three weeks old, they will not lose flesh or cease to make good growth when taken away from her if judiciously fed, especially if there is plenty of sweet skim milk for them, but at eight weeks old they should have learned to eat it slightly sour. In these days of hand separators it seems to be as easy to have sweet milk as sour.

Lacking milk, the best feed is a mixture of wheat bran and shorts scalded and allowed to cool, but not to get cold, about blood warm. To this corn or gluten meal may be added when they are three months old, and if they are to be slaughtered at seven months old the meal may be gradually increased and the bran decreased, but not omitted entirely. A part bran or shorts may help to increase the proportion of lean meat in the carcass, and an exclusive corn diet makes the ribs, chine and hams too fat to suit most of the best customers. Clover or grass, or weeds, or waste vegetables should be a part of the daily ration, if they are not turned into a pasture in the summer. In the winter a little clover hay or fine hay and a few raw roots may be given instead, more because they help improve the digestion of other food than for the food value they have. I never found any gain in cooking any vegetables for young or old hogs excepting potatoes. Green food or roots should be given the sow every day for two weeks or more before farrowing and for 24 hours after the pigs drop only cold water or a little milk should be given, to which a handful of shorts may be added on the second day. But for four days at least give only a thin slop. After the pigs are a week old the sow may be liberally fed, but not with much corn meal, as it is too heating. In winter there is less danger from its use, but even then do not make it more than one-fourth of the grain ration until the pigs have begun to eat well at their own trough.

While they are suckling after three weeks old they should have a trough to which she cannot get, and the feed should be milk or a thin slop. After they are taken from the sow they should be fed three or four times a day at first, but rather a little less than they would eat than a little more. When fattening really begins two feedings a day is better than three, unless the morning feed is given very early and the night feed very late.

The boar pigs not wanted for breeders—that is, all that are not pure-bred and all but the best of those that are—should be castrated at about four weeks old. This allows them to heal well before they are taken from the sow, and if any are ruptured in the operation they are then large enough to be killed for roasting pigs. Every farmer should know how to do this. The spaying of sows

that are to be fattened may be desirable, but it is little practiced in New England. Very few know how to do it properly, and there is always some risk of loss even when done by those who are called experts.

Before farrowing the sow should have a dry, clean nest, not of long straw, but of straw cut short, or, better still, of dry forest leaves. The pigs when small sometimes get their legs tangled in the long straw that they cannot get away when the mother wants to lie down, and thus she may crush or smother them. To prevent them from being crushed between her and the side of the pen, it is well to have a railing around it about a foot high and 8 to 12 inches from the floor.

Do not fail to let her have two litters a year, as when she does so she will have larger and stronger litters than when she has but one. If there is no one who wished to buy the fall pigs to fatten or keep over winter, there is always a market for them as roasting pigs at from four to eight weeks old. While roast pig is not likely to become as popular as roast turkey, the demand for it seems to be increasing each year.

Where one has a warm pen sheltered from snow and cold winds the fall pigs can be fattened as quickly, though perhaps not as cheaply, as the spring pigs. They may be and should be fed more liberally on corn meal than is

desirable to feed during the summer, as the corn is a heating food as well as fattening. A handful of beef scraps, fine ground, mixed with each pailful of mash, is good both for the fattening hogs and the breeding sows, and for the latter it may help to remove the tendency to eat her pigs, which is shown by some sows. It is more generally the result of a feverish condition, shown by costiveness, than a craving for meat, but the beef scraps and roots are a remedy for this.

The sow should not be allowed to climb over a rail, a door sill or other obstacle while she is carrying her pigs, nor should she be struck on the nose. The first I have known to cause abortion and the last is said to do so, and it might be better not to chance it.

Many farmers like to allow the sows and pigs to run in the orchard during the summer and fall. They eat the early fallen fruit and thus destroy the larvae of many insect pests and the pupa of others; they kill grass roots and weeds and fertilize the soil under the trees. For an old orchard it may be very good, although, having tried both, I prefer sheep in an orchard and the swine in a yard. A flock of sheep will do all the hogs are said to do and do it better.

With plenty of muck from the swamps and sods from the fields to absorb the liquid manure, the hog yards can be made to supply a large amount of fertilizing material. Some like to throw the stable manure into the yards that the hogs may work it over, or to keep the hogs in a barn cellar, as they make better and more wholesome pork. Nor do I like to have my hogs root for a living when I am fattening them.

There are some who are near our large cities who keep large numbers of hogs and feed them upon the swill collected by the city, which they say costs nothing but the carting home. Sometimes the pork made in this way seems to be almost clear profit, and at other times the loss overbalances the gain. In herds so kept there are often many deaths from what the owners call "hog cholera." Whether it is so or not, and I think it is not, it is caused by feeding upon fermenting rotten food which has become poisonous by decay. Nor is the matter helped at all by the washing powders used in cleaning the dishes at many places, which goes with the dish water into the swill barrel. Certainly some outbreaks of so-called hog cholera have been traced directly to the presence of these powders in the food thus gathered up.

I would not like to eat pork thus made, for I do not think it can be sweet and wholesome. The scraps from the home table or from a nearby hotel or boarding house

(Continued on page 14)



Brood sow owned by W. H. Robbins, Springfield, Ohio.

Pigs On the Farm

The question of pigs on the farm should be gone into by every farmer. Some people may regard the injunction as unnecessary, but it is a fact that one does come across some farms destitute of any pigs. This is a mistake, especially where there are dairy cows, with the usual output of skim milk, whey from cheesemaking, and other things which couldn't possibly be used to greater advantage than in feeding pigs. No one who has noticed the average piggery will attempt to deny that there is room for great reform in the matter of housing and general treatment of the pig.

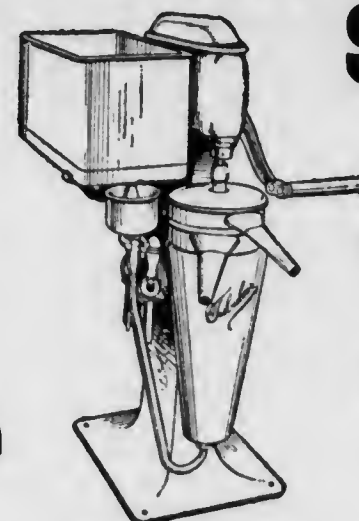
As a rule, pigs are kept, fed and cleaned in a more or less neglectful fashion. Swine fever, that dreaded plague, would be almost, if not altogether abolished, and with it many restrictions that are often laid down, if there was systematic cleaning and housing, proper feeding, and no overcrowding. As it is, the careful pig-keeper, who looks after his animals properly, suffers with the neglectful one, who is really a party to the mischief, says W. R. Gilbert.

There is, especially in the vicinity of large cities, a brisk demand throughout a good portion of the year for young succulent pork. It is not a difficult thing, now that such marked improvement has taken place in the stamp of pigs kept throughout the country—the old, high-backed, long-snouted, gaunt looking animal having almost entirely disappeared—to breed a stamp of pig that, plump and well-rounded from the first, can be got ready for pork in a surprisingly short time. Pigs destined to be fed as porkers should be weaned gradually, and not too early. As soon as they are able to eat, give them, in a low and roomy trough, long enough for each of the litter to get and equal share, a feed of good thirds and fine sharps mixed with skim milk. This should be fed warm if the weather is at all cold, and should have the chill taken off even in summer.

Give just what they will speedily eat up twice a day. Overfeeding should be guarded against, for young pigs are soon put off their food if it is left to sour under their noses. When weaned, three meals a day should be given, mixed to the consistency of thick cream. They should now have small, or what are called "pig potatoes," boiled and mashed, and added to the sharps. As they make their growth, a little corn meal may be added, but not much, as it is too heating for young pigs. Barley meal, peas and beans may also be given. Bran, because of its character of composition, cannot be considered as a wholly desirable food for porkers, and is best left out of the menu. Some breeders, following the dry feeding system, give a midday meal of crushed grain, or grain and peas mixed. Peas are, of course, a highly nitrogenous food. The one thing to keep in view is a steady "coming-on" condition in the pigs. There should be no backening whatever, nor need there be if they have a roomy, clean, well-littered sty, and are kept under healthy conditions,

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course, realized. Nevertheless, a bacon pig is now ready for market much sooner than was the case a few years ago, when abnormally fat and large specimens, weighing 300 to 400 pounds, were the fashion.

Latter-day taste inclines to a neat, plump pig of from 200 to 250 pounds. Where bacon hogs are desired, the sow should be mated in November or December, the piglings putting in an appearance in March or April, having no intensely cold weather to face. They will then, if well pushed on, be ready just as the killing season commences. There is, of course, great economy in using feeding stuffs grown on the farm, and as barley meal is such a valuable adjunct in the production of good bacon, it should be largely used. Milk is of great value, whether skimmed or sour, or buttermilk. Bean meal, pea meal, and wheat meal all go to form a good feeding ration; whilst small potatoes cannot be used to better advantage than to be cooked and mixed with the meals. If it is thought desirable to include cornmeal in the food at the later stages of fattening, well and good. Warm housing, with, however, proper ventilation, is of much importance in the treatment of fat pigs; they lay on flesh with much greater rapidity when thoroughly comfortable. Always provide, also, a good bed of clean straw.

In the feeding of show pigs a great variety of waste foodstuffs can be utilized. While it is necessary that the frame of the "show" shall be well built up, the laying on of the fat beyond a certain quantity is not necessary. Exercise is good for the pigs, and, being grass eaters, they should have the range of a good pasture field. A slop of bran and thirds, with a little rye meal or barley meal for a change, will be sufficiently good for show pigs. When the period arrives for them to be kept in the sty and fattened, the better food necessary must be given gradually or evil may result. Therefore, it must be borne in mind that the system of feeding must be modified in accordance with the particular stage at which the animal is.

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INTERNATIONAL LIVE STOCK EXPOSITION, DEC. 1 TO 8, 1906, CHICAGO.

The annual meeting of the board of directors for the selection of judges of the International Live Stock Exposition was held yesterday in the rooms of the Saddle & Sirlin Club, in Chicago, and the following judges were named in the sections as shown hereunder:

CATTLE.
Breeding and Fat Classes—Shorthorns. J. H. Miller, Peru, Ind.; Wiley Falls, Des Moines, Iowa; John Lewis, Lafayette, Ind.

Angus.
Breeding class, Prof. W. J. Rutherford, Ames, Iowa; fat class, Louis Pfeiffer, Chicago; carload class, Louis Keefer, Chicago.

Hereford.
Breeding class, N. H. Gentry, Sedalia, Mo.; fat class, W. S. Van Natta,

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Fowler, Ind.; Thos. Mortimer, Madison, Neb.; Thos. Clark, Beecher, Ill.

Breeding and fat classes, Judge J. Calvin Ewing, Youngstown, Ohio.

Breeding and fat classes, J. H. Gillman, Colorado Springs, Colo.

Breeding and fat classes, Prof. Thos. Shaw, St. Anthony Park, Minn.
Grade and cross-bred and champion steers—Foreign judge, Arthur P. Turner, Pembroke, England.
Carload fat cattle, James Brown, Chicago.

Carloads feeder cattle, Harry Schirding, Petersburg, Ill.
Carcass cattle, Wm. Russell, Chicago.

SHEEP.

Breeding and Fat Classes—Shorthorns. Geo. Allen, Lexington, Neb.

Southdown.

Prof. G. E. Day, Guelph, Canada.

H. L. Compton, Monroe, Ohio.

Hampshire.

P. W. Artz, Osborn, Ohio.

Dorset.

Arthur G. Danks, Allamuchy, New Jersey.

Prof. J. H. Skinner, Lafayette, Ind.

Cotswold.

J. Hal Woodford, Paris, Ky.

Lincoln.

To be selected.

Leicester.

J. M. Gardhouse, Weston, Ontario.

Rambouillet.

Prof. C. S. Plumb, Columbus, Ohio;

Prof. J. H. Skinner, Lafayette, Ind.;

Prof. W. C. Coffey, Urbana, Ill.

Grade and cross-bred and champions, sheep, Frank Fisher, Chicago.

Carloads sheep, Robt. Mathison, Chicago.

Carcass sheep, H. A. Phillips, Chicago.

SWINE.

Berkshire.

W. D. Fletcher, Lowell, Mass.

Poland-China.

J. M. Kemp, Kenney, Ill.

Chester White.

To be selected.

Duroc-Jersey.

To be selected.

Tamworth.

E. N. Ball, Hamburg, Mich.

Yorkshire.

J. J. Ferguson, Chicago.

Hampshire.

J. E. Price, Lexington, Ky.

Grade and cross-bred and champions, Chas. Goepfer, Chicago.

Carloads Swine.

Chas. Chandler, Chicago.

Harry Boore, Chicago.

HORSES.

Percheron.

Prof. C. F. Curtiss, Ames, Iowa.

Clydesdale.

Prof. W. L. Carlyle, Ft. Collins, Colo.;

Prof. Geo. C. Humphrey, Madison, Wis.;

Prof. F. R. Marshall, College Station, Texas.

Shire.

Alex. Galbraith, Janesville, Wis.

Belgian.

Wm. Bell, Wooster, Ohio; W. E. Prichard, Ottawa, Ill.;

Prof. Wayne Dinsmore, Ames, Iowa.

German Coach.

Mat Biers, Mendota, Ill.

French Coach.

Harry McNair, Chicago.

Hackney.

Henry Fairfax, Aldie, Va.;

Prof. W. L. Carlyle, Ft. Collins, Colo.;

Prof. W. J. Kennedy, Ames, Iowa, referee.

Shetland Ponies.

Wm. J. Sampson, Youngstown, Ohio.

Ponies Other Than Shetland.

Wm. J. Campson, Youngstown, Ohio.

Draft Horses in Harness.

Prof. C. F. Curtiss, Ames, Iowa.

Superintendents in charge of departments:

Cattle Department.

Thos. Clark, Beecher, Ill.

Horses.

R. B. Ogilvie, Chicago; J. S. Cooper, Chicago.

Sheep.

Mortimer Levering, Chicago; C. F. Kurtze, assistant, Indianapolis, Ind.

Carloads.

Richard Gibson, Delaware, Ont.;

W. Martin, Gotham, Wis.

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Bursonville, Bucks Co., Pa. GREENWOOD STOCK FARMS

Farmers and Breeders I now have a large stock, probably the best I ever owned, thoroughbred Poland-China and Chester White Pigs, 2 to 6 mos. old, sows bred, boars ready for service, all from prize winning stock. Guernsey and Jersey Cattle. Buff and Barred Plymouth R. Chickens.

Farms and Residence, Greenwood, Pa.

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POLAND-CHINAS

of Best Strains

Growthy, lengthy gilts, good bone, coat and head and fancy ears. Sold bred or open. Priced to sell, as I need the room. Satisfaction guaranteed. (Also September Pigs.) Write for circulars and particulars to

A. F. SIEFHER
St. Charles Co., DEFIANCE, MISSOURI

BLOODED STOCK for November.

Carenses.
Prof. C. F. Curtiss, Ames, Iowa; Prof. Wayne Dinsmore, assistant, Ames, Iowa.

Students' Judging Contest.
Superintendent, W. J. Black, Winnipeg, Manitoba.

Horses.
Judges, Jas. Z. McLaughlin, Janesville, Wis.; J. M. Fletcher, Wayne, Ill.;

Prof. W. L. Carlyle, Ft. Collins, Colo. F. W. Harding, Waukesha, Wis.;

O. E. Bradfute, Cedarville, Ohio; Prof. H. W. Mumford, Urbana, Ill.

Swine.

N. Noel Gibson, Millbrook, N. Y.;

Geo. McKerrrow, Pewaukee, Wis.;

R. S. Shaw, Agricultural College, Mich. D. Fletcher, Salem, Mass.;

Prof. W. B. Richards, Agricultural College, North Dakota.

Judges for College Classes.
Arthur P. Turner, Pembroke, England;

Frank Fisher, Chicago; Chas. Goepfer, Chicago.

Exhibits.
G. Howard Davidson, Millbrook, N. Y.;

Prof. W. A. Henry, Madison, Wis. Committee on Judges of Exposition.

G. Howard Davidson, Millbrook, N. Y.;

A. J. Lovejoy, Roscoe, Ill.;

R. B. Ogilvie, Chicago.

The J. Ogden Armour \$5,000 annual scholarship subscription to be distributed through the medium of this exposition was promptly accepted by the board and a resolution to Mr. Armour for his most generous gift placed upon the records of the association.

A committee was appointed consisting of Mr. A. G. Leonard, Mr. A. H. Sanders and Mr. R. B. Ogilvie to call a meeting of the instructors of the agricultural and live stock departments of the various agricultural colleges of the United States for the purpose of agreeing upon a basis for dis-

Horse Owners! Use GOMBAULT'S

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A Safe, Speedy, and Positive Cure
The safest, best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.

THE LAWRENCE-WILLIAMS CO., Cleveland, O.

PRIZE-WINNING HERD OF DUROCS

We have for sale a fine lot of Spring Boars and Gilts sired by such boars as Notcher's King, Orion Milton, Jackson Wonder, and others of equal breeding. Our prices are very reasonable. Write us and get the best.

LEFEVER BROS., R. R. 4, Oblong, Ill.

C. M. GRIFFIN

Charleston - - - Illinois

Breeder of

High-Grade O. I. C's.

Some fine gilts five to twelve months old, bred or open. Young boars ready for service. The finest lot of fall pigs that ever happened. Let me hear from you. I will please you.

Reasonable prices.

tributing the J. Ogden Armour scholarship fund.

The speech of Mr. J. J. Hill at the dedication of the new amphitheatre on the Minnesota State Fair grounds received official recognition and endorsement by the board of directors and the following resolution was passed thereon:

"Resolved, That it is the sense of this board that Mr. J. J. Hill is entitled to the grateful thanks of all friends of progressive agriculture for the masterly marshalling of facts bearing upon the future of American husbandry presented in his late address at the annual show of the Minnesota Agricultural Society, and we hereby tender to him our hearty acknowledgment of the value of same at this juncture of the farming interests of the United States."

The corn contest, which was omitted from the preliminary classification will be taken up and carried on at this year's exposition, same as in 1905, for the Cook Trophy.

The board decided to award the Rosenbaum Specials, which are as follows, to the colleges located in the states whose exhibitors receive the most money from the International's own classification, not including specials:

To the state whose exhibitors win most in premiums.....\$500

To the state whose exhibitors win the second greatest amount in premiums.....300

To the state whose exhibitors win the third greatest amount in premiums.....200

These prizes are to be paid to the experiment stations of the winning states and by them paid out as prizes on live stock or to successful students in judging live stock and grain, or both, at the winter meetings of the agricultural colleges, known as the "Farmers' Short Course in Agriculture."

THE DRAFT HORSE CROP.

In these times of increasing value of good draft horses more and more attention is given to breeding the best. Here is a note from the Farmer's Tribune, of Iowa, that goes to the point of this matter. It says: "There is no crop raised on the American farm wherefrom may be as readily realized as the draft horse foal crop. From weaning time to maturity, the draft horse is ready money, and he brings in plenty of it. A comparison may be made with dairying, or indeed with any other branch of farming. In the fall prices up to \$125 may be obtained for good well-grown draft foals. There is the keenest competition for them. Every one seems to want them. That is a sort of outside price for them, it is true, so we may set it lower and we will be well within the mark when we say that in the fall along in sale time \$90 to \$100 will be readily obtained for such youngsters. Out of this sum there must be taken the price of the service fee, say \$20, whatever it has cost to feed the foal all the grain it would eat for five or six months—and that is not much—and the interest on the money invested providing the mare has been idle all summer, which is not often the case. Then we must count out something for depreciation and something more for the pasture, and when we figure it all in together we have only a small part of the price received."

"On the farm, pure-bred draft mares do just as much work as grades, if not more, certainly far more and better work than common

horses. The possession of them adds greatly to the social standing of their new owner and his credit increases in his community. When he has something to sell, he gets a bunch of money in cash. We know of a man who started in with two mares, one of which was old and cheap and bred but every second year. At the end of six years he had sold three stallions at an average of \$7,000 each and sold what he had left for \$4,000—or a total of profit of \$5,700, on an investment of \$1,300 in six years.

A Humane Society in a Bottle

KENDALL'S SPAVIN CURE

Nothing affords such relief for Curbs, Splints, Ringbones, Spavins and Lameness as

Kendall's Spavin Cure.

Whitford, N. C., June 28, 1906.

Dr. B. J. Kendall Co., Newburgh, N. Y.

Gentlemen—I have used Kendall's Spavin Cure on Spavins, Ringbones, Sweeney, Galls and Sore, and it has cured them all.

Very truly yours, S. M. Clark.

Price \$1; 6 for \$5. Greatest known Liniment for family use. All druggists. Accept no substitute. The great book, "Treatise on the Horse," free from druggists or

Dr. B. J. Kendall Co., Newburgh, N. Y.

No More Blind Horses For Specific Ophthalmia, Moon Blindness and others Sore Eyes, BARRY CO., Iowa City, Iowa, have a cure.

VETERINARY COURSE AT HOME.
\$1200 year and upwards can be made taking our Veterinary Course at home during spare time; taught in simplest English; Diploma granted, positions obtained; successful students; cost within reach of all; satisfaction guaranteed; particulars free. **Ontario Veterinary Correspondence School, London, Can.**

Your Wife or Daughter
Can drive your most fractious horse if he wears a Beery Bit. Horse is under perfect control all the time. Can be used on gentlest colt or runaway kickers with equal satisfaction. 10 days free trial. Prof. B. S. Beery, Pleasant Hill, Cal.

Farmer's Sons WANTED with knowledge of farm stock and fair education to work in an office. \$600 month with advancement, steady employment, must be honest and reliable. Branch offices of the association are being established in each state. Apply at once, giving full particulars. The VETERINARY SCIENCE ASSOCIATION, Dept. 12, London, Canada

LEARN VETERINARY DENTISTRY and make \$2000 a year. We teach you at home in three months of your spare time by illustrated lectures and grant diploma with degree. Particulars free. See Detroit Veterinary Dental College, Detroit, Mich.

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Made to suit YOU. Any style you want. From Out-quest to modern style. Satisfaction guaranteed or money back. Illustrated catalog No. 7 and price list FREE. Send for it at once.

THE KING HARNES COMPANY

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GILSON GASOLINE ENGINE

\$60 A Boy or Girl can run it

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GOES LIKE SIXTY SELLS LIKE SIXTY SELLERS SIXTY

Sent on Free Trial

For Pumping, Cream Separator, Churn, etc.

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Port Washington, Wisconsin

116 Park St.

With the Business Man.

Business Points You Should Keep Posted
Upon. Means Money for You.

L. C. Coleman, Mt. Pleasant, Iowa, offers a choice lot of Duroc-Jerseys. Western breeders should write him at once.

Lefever Brothers, Oblong, Ill., are advertising an extra fine lot of Durocs in this issue. On page 5 we show a bunch of ten bridged gilts they offer for sale.

Myers & Son, Bridgeville, Del., offer a great lot of Angus cattle for sale. On page 7 you will find a photograph of Prince Barbara, one of the finest Angus bulls in the country. Write them for his record.

Aldoro Farm, Rosston, Pa., is offering a lot of Yorkshire Swine and Guernsey Cattle. After the show record made at St. Louis the stock offered does not need any recommendation. H. T. Morgan, our old friend, is superintendent of the farm. Write him.

Wait no longer for gilts by Missouri Black Mischief Maker, as he is dead. His strong points as a breeder were large litters, no runts, all good smooth, lengthy and growthy, solid black with white points, fancy head and ears. A. F. Siefker, Defiance, Mo., says that he never owned a boar that bred such nice gilts as he did. He was bred right to breed on. His sire, Mischief Maker, sire of the Grand Champion at St. Louis World's Fair; dam a litter sister to Missouri Black Perfection, that is enough to know them. Mr. S. now has Mo. Black Mischief Maker 2 and Defiance Chief in his place, and they will be sure to be heard from later. Write your wants to him.

Horns Positively Dangerous. Every cow in your herd may look very docile and kind-tempered. But cows cannot be depended on. They may suddenly injure you, your hired man, worry the herd and even cause their death or disablement.

It's safer for all to dehorn every cow, steer and bull.

Whether dairyman or stock-raiser, this argument applies with equal force. Dehorned steers put on two to three hundred more pounds of flesh when compared with those having horns, because they rest more quietly.

Dairymen need not fear to dehorn. The excitement lasts but a few hours and the little loss of milk (usually less than 2 per cent) is more than compensated by the greatly increased flow caused by the greater quietness of the entire herd.

DAN PATCH 155, the pacing king, owned by the International Stock Food Co., Minneapolis, Minn., that has astonished horsemen by the great fame he has obtained year after year in his races and always being in the pink of condition, has been fed International Stock Food three times a day ever since he was purchased by his present owners. His physical condition has been marvelous and if this stock food has been the means of keeping this great horse in condition to pace so many fast miles year after year then it is more than the manufacturers claim for their goods. Stockmen all over the country seem to back the claims made by this company. We advise our readers to look up their adv. on page 24 of this issue and write them at once. You cannot do better than keep your stock in good condition when it can be done so cheaply.

"Building Business and Making Men" is the title of a booklet gotten out by the White Class Advertising Co., Chicago, Ill. This book points out many of the things that go towards making success. It is one of those live subjects, handled by experts, that makes every sentence valuable, and every person doing business should read a copy of this booklet. It is calculated to inspire one to better work. It can be had free by addressing the above-named firm.

Save time and money by doing your own grinding. The time lost in going to the grist mill and the toll taken by the miller will more than pay for the mill. This is something that every stockman should take account of. We advise them to look up the mills advertised in this issue and write for prices, etc. The best money that one can invest is in a few postal cards and learn what can be saved by purchasing farm machinery. Do this now and be ready to do your own grinding this winter.

The Humane way to Dehorn. The humane instrument to use manufactured by M. T. Phillips, Pomroy, Pa., is the Keystone Dehorner. It is made in two designs—Improved and Regular style. Both are standard, the former being lighter in weight and of greater cutting power. It is built on the same principle as the regular Keystone.

The Keystone severs the horn "in a jiffy" with little pain. It leaves a clean, smooth stump that readily heals



with scarcely any discomfort to the animal. All over in a minute. No sawing, torn flesh, crushing or mangling of head. The cutting blades are of the finest steel specially tempered—keen and strong.

The Keystone is very popular at experiment stations.

Mr. Phillips sends free a handsome book in orange and black that discusses the subject thoroughly.

list of other metals. The great mining prosperity of the past two years has demonstrated many things for Nevada. There has been a notable increase in the production of gold, a great revival in silver mining, values have been proved still greater with deep mining, thus removing the mistaken idea that Nevada mines "do not go down."

Tonopah to-day is producing millions in gold and silver and a city of several thousand inhabitants has sprung up as if by magic where a few years ago there was but a desert waste. Prospectors with all their worldly goods packed on burros set out in every direction from Tonopah and the discoveries at Goldfield astonished the world and resulted in the extension of the Tonopah railroad south to the mines. Next the Kawich and Bullfrog mines were discovered and now Manhattan is setting the whole country aflame with gold discoveries. From time to time during the past three months the editor of The Western Trade Journal has had occasion to speak in favorable terms of several Nevada companies. We have not hesitated to recommend the stock to our readers, as our investigations of these enterprises have been such as to convince us that as legitimate and promising mining enterprises nothing more secure are on the market. It is therefore a satisfaction to be able to add one more promising company to our list of reliable companies. In this connection we refer to the Pittsburgh-Manhattan Mining Company, whose properties consist of five claims, located in the famous Manhattan mining district, Nye County, Nevada. Developments are being made as rapidly as possible. The company is driving a tunnel at the present time on the Money Power claim and expects to tap two highly mineralized veins within a short time, that outcrop at several places on the surface and carry values in gold and silver. The company is incorporated under the laws of Nevada, with a broad and ample charter. Capitalized for \$1,000,000, shares \$1.00 each, fully paid and non-assessable. Four hundred thousand shares have been set aside as a treasury fund for the sole use and benefit of the company in the development and operation of its properties and for such other uses as are needed by the company. You can now obtain the shares at 10 cents per share, cash or installments. You don't have to be rich in order to become a shareholder in this splendid company. If you are not in a position to pay cash, the company will accept a small payment down with the order, the remainder in five monthly installments.

This company has been the subject of painstaking investigation on the part of the Western Trade Journal, and a spirit of fairness impels this statement, that the most searching examination convinces us that the company offers the best form of investment in Nevada mining stock within our knowledge. For particulars not made plain by this free and unsolicited editorial, address Mackay, Monroe & Company, Fiscal Agents, P. O. Box 792, Tonopah, Nevada.

Mention Blooded Stock when writing advertisers.



MARKET REPORTS

Receipts of cattle at Chicago during the month of October were very little different from the preceding month, the total being around 356,000. As usual for that season of the year a considerable part of the supply was made up of Western range cattle, the movement of which is now practically over for this season, although there will be straggling lots coming along for two or three weeks. As buyers will now have to depend entirely on corn-fed stock for supplies we look for better trade on native cattle and think that persons who have been holding back their corn-fed cattle, awaiting the close of the western shipping season, may now safely send their cattle in at any time. We look for a good market on all desirable corn-fed cattle during November and December. Prices for best cattle have held at a high level throughout the month. On Monday, Oct. 8th, with 30,293 cattle in the yards, we sold for M. O. Sullivan, of Waveland, Ind., 15 steers averaging 1588 lbs., at \$7.25, topping the market 25 cents over all previous sales this season. On Oct. 15th we sold for Fred V. Stowe, Grimes, Ia., 31 head of 1561-lb. Wyoming bred Hereford and Red Polled steers, branded, at \$7.25, the highest price of the season for fed westerns. On October 17th we sold for Wm. Riggs, Shelby, Ind., 15 high grade horned Hereford yearlings averaging 1102 lbs., at \$6.80, top price of the year for yearlings. It must be borne in mind, however, that all the above cattle were of outstanding quality and these prices are no criterion of value for common or inferior stock; in fact, there have been comparatively few cattle here good enough to sell above \$7.00, big bulk of the fair to choice steers going at \$5.50 to \$6.75.

Receipts of hogs for the month of October were 510,023, or 69,000 less than the same month a year ago. The first ten months of this year show a decrease of 156,390 compared with the same time last year. A year ago the month of October show a decline from 40c to 60c from the opening of the month. Prices are now \$1.00 to \$1.25 per cwt. higher than the same time last year. A year ago we quoted choice butcher selling at \$5.25 to \$5.32½, whereas to-day the

same class of hogs are selling from \$6.30 to \$6.40. The average cost of to-day's hogs was around \$6.15, while on the same day a year ago it was \$5.10. To-day we quote choice light from \$6.25 to \$6.35; choice heavy from \$6.20 to \$6.30, and packers from \$5.90 to \$6.00. The quality for the past month shows improvement from the opening of the month. We look for heavier receipts for the coming month and shall not be surprised to see hogs selling from 50c. to 75c. per cwt. lower.

Receipts of sheep during October numbered 631,039, a decrease of about 60,000 compared with last month's record-breaking run. There has been a strong demand for feeding stock all the month; a great many feeding sheep and lambs have been shipped out to Michigan, Indiana and Ohio feed lots, as well as large numbers to other states. We quote as follows: Good to choice export wethers, \$5.50 to \$5.75; fair to good wethers, \$5.15 to \$5.35; good to choice heavy ewes, \$5.35 to \$5.50; choice breeding ewes, \$5.25 to \$5.50; medium ewes, \$4.75 to \$5.25; culls and tail ends, \$2.50 to \$3.50; choice yearlings, \$6.40 to \$6.60; fair to good yearlings, \$6.00 to \$6.25; cull yearlings, \$4.25 to \$4.65; choice lambs, \$7.60 to \$7.75; fair to good lambs, \$7.10 to \$7.40; common to fair lambs, \$6.25 to \$7.00; cull lambs, \$5.50 to \$6.00; good to choice bucks, \$3.25 to \$3.75; choice breeding bucks, \$4.50 to \$5.00; good to choice range feeding lambs, \$6.50 to \$6.60; fair to good range feeding lambs, \$6.25 to \$6.45.

One of the best Duroc sales recently held in Indiana was the event of Sept. 29th, at the home of Joshua Rothrock, Centerton, Ind., southwest of Indianapolis. The weather was inclement and the crowd was not large, but it was a business crowd. The average of nearly \$25.00 was not bad when the fact that nearly all were spring pigs is considered.

The great sire and show hog, "Beat-Him-if-You-Can" was catalogued but was not offered because of the rather small attendance of breeders desiring a high quality herd header.

When Mr. Rothrock stated that if enough were interested he would put him up, one breeder said he would start one-fourth interest in him at \$250. He was not offered. But negotiations were commenced which resulted in the S. R. Quick & Sons, incorporation, Gosport, Ind., and Jap. Duckworth, Martinsville, Ind., each purchasing one-third interest for \$1,000 each, in this great hog. Mr. Rothrock retains the other one-third interest.

This famous hog is a son of "Can't-be-Beat" that sold recently for \$2,500, and his dam is "Dewdrop-Maid," the dam of the heads of 17 herds representing four different states. He has a fine show record, weighs 710 lbs. as a 3-year-old not in show flesh and fitness and is unquestionably one of the greatest hogs of to-day. Messrs. Duckworth and S. R. Quick & Sons made purchase of a majority of the pigs sold that were sired by "Beat-Him-if-You-Can." Quick & Sons also secured "Hessie-Top-Notcher," by "Top-Notcher," the sire of "Tip-Top-Notcher," that it will be remembered recently sold for \$5,000, the highest price ever paid for a Duroc hog.



FOR SALE

Extra Fine This Falls

50 Poland-China Pigs 50

Sired by Ohio's noted hog Golden Rule, and out of splendid well bred matured sows. These pigs are extra fine and will be sold cheap if taken soon. Give me an order and see if I don't please. You can get winners for next years fair, and buying them small the express is light. Satisfaction Assured.

W. C. WELCH
Harveysburg, Warren Co., O.



The Secretaries Corner

The Forty-third Annual Convention of the National Wool Growers' Association will be held at Salt Lake City, Utah, on January 17, 18 and 19, 1907.

Harry G. Krum, Secretary American Yorkshire Record, sent us the annual published by the association. It is full of information, not only to Yorkshire breeders, but to all hog raisers. Every one should have a copy. For address see directory in this paper.

The American Devon Cattle Club sends us a copy of their year book containing a record of all animals recorded during 1905, together with a mass of information about the little red cow. The book can be had for 25 cents and it should be in the hands of every one interested in dairy cattle.

The American Hereford Cattle Breeders' Association held their annual meet October 10th, and elected Calvin Cameron, of Arizona, President; Robert H. Hazlett, of Kansas, Vice-President, and C. R. Thomas, of Kansas City, Mo., Secretary.

The report of the secretary shows the association in a harmonious and flourishing condition.

The American Royal Live Stock Show closed a very successful meeting, from October 8 to 13, inclusive. The exhibition included Hereford, Shorthorn, Polled-Angus and Galloway Cattle, Percheron, Clydesdale, Shire, Hackney, and Shetland horses, Poland-China, Duroc-Jersey, O. I. C. and Berkshire hogs, Sheep and Angora goats. The attendance was 6,000 people. There was also a public sale of 50 Herefords, 50 Shorthorns, 50 Angus and 50 Galloways, about one-half bulls and one-half females. Average on Herefords, \$193; Shorthorns, \$190; Angus, \$98; Galloways, \$98.

The American Breeders' Association will hold its regular winter meeting at Columbus, Ohio, January 15-18, 1907. The daily sessions are scheduled to take place at the University and Board of Trade buildings through the hospitality of the Ohio State Board of Agriculture, the State University and the Ohio agricultural and plant breeding societies.

The American Breeders' Association has organized over forty committees composed of the leading workers and investigators in the fields delegated to them. The report of these committees will be a prominent feature of the program at Columbus. Able speakers and those who have done things in breeding animals and plants will also make the meeting attractive and a large attendance from all parts of America is assured.

The association has issued two reports, Volumes 1 and 11, which are sent post-paid to all members. Annual membership in North America is \$1.00; foreign, \$2.00; and life membership is \$20.00. For associations and institutions life membership is limited to 25 years. There are now a thousand annual members and 42 life members.

Guernsey Breeders' Meeting—The Eastern Guernsey Breeders' Association met on September 18th with T. W. and I. W. Roberts, at "Pencoyd Farm," Bala, Pa. The members and guests assembled about 11 a. m. and spent a couple of hours inspecting the buildings and the fine herd of Guernsey.

seys. Two splendid bulls, Glenwood's Mainstay 16th and Golden Secret of Lilyvale, were much admired and there was a good deal of difference of opinion as to which was the better one.

At 1 p. m. lunch was served under a great tent, after which the meeting was called to order by 1st Vice-President Frank E. Patterson. Thirty members responded to their names when the roll was called. The minutes were read and approved. M. T. Phillips, of Pomeroy, was elected a member of the Association.

The speaker of the day, Dr. Leonard Pearson of the Pennsylvania Livestock Sanitary Board, was introduced at this point and read a most valuable paper upon, "The Vaccination of Cattle Against Tuberculosis."

When the Doctor had finished he was given a hearty vote of thanks. With the permission of the writer, the secretary was instructed to have the paper published in pamphlet form.

When the meeting adjourned, several fine 2-year-old heifers were led up and occupied the attention of the breeders for some time; they then went back to the barn for a final look at the cows before they departed for the train. M. M. Hollinsworth, Sec.

Great Swine Breeders' Meeting. Secretary W. M. McFadden writes us as follows:

I want to call the attention of breeders to the coming meeting of the American Poland-China Record Association, which will be held in Chicago during the International Stock Show. The date for this meeting is Thursday, Dec. 6. The meeting will be held in the Live Record Building, in the assembly hall provided for such meetings. The great interest manifested in this meeting by breeders I have met at the various state fairs convinces me that the attendance will be good, and that for the first time in the history of Poland-Chinas we will have a meeting of breeders that will be thoroughly representative and national in its character.

I expect to make definite announcement of the date and arrangements in the November issue of The Swineherd, but thought it advisable to call the attention of those interested to the coming meeting at this time, so that they could arrange to attend the International Stock Show and the American Record meeting. This will be quite an important meeting from the standpoint of Record affairs, as a complete set of officers are to be elected. In the reorganization affected last spring the officers elected were to serve only until the first meeting of the stockholders, to occur in December.

The business of the American Record is rapidly growing and we are getting business almost every day from new patrons and in territory that formerly sent the American Record very little business. One of the most remarkable things in connection with the business is the unusually large inquiry for stock. Evidently the fact that we sell a share for \$20, which carries with it an interest in the surplus, amounting at the present time to over \$12, is considered a good investment, looking at the matter from a purely business standpoint. The remarkable growth of the business of

the Record indicates that our surplus will certainly get larger from year to year. The Record has always been careful to keep all its shares bought up from members who have gone out of the business, so that it is never any trouble to get cost price for a share of stock in the American Record.

Most members find the volumes a very great convenience. The first volumes which we issue every year each contain more than 1,000 pages. They are sent to all stockholders who ask for them, with all charges prepaid. I suppose these are some of the considerations that make the inquiry for stock so unusually large. A great many new breeders no doubt identify themselves with this record because of the fact that it is the largest swine Record in the world and is exceeded in amount of business by only one Record for any kind of live stock.

A great many patrons write me to express their high appreciation of the certificates of registry we issue. These are not only very extended, but enable the holder to give a complete breeding of his animals without waiting for the printed volume. No Record in the country issues, without charge, anything like as long a certificate of registry as does the American Record. Unless pedigrees require some correspondence to complete them, certificates of registry are sent within a very few days after the pedigrees reach the office. For some time past certificates of registry have been leaving the office within a week of the time the pedigrees were received.

The handling of the large volume of business in this manner evidently meets the hearty approval of breeders generally. Nothing so well illustrates this approval as the steady and remarkable increase in business from year to year. Those who may not be thoroughly posted on the Record and its method of transacting business should write for blanks and information to the secretary, addressing him W. M. McFadden, Union Stock Yards, Chicago, Ill.

Headache

Want to know how to stop it? Of course you do—but you don't want to take anything that will injure you, or cause distress afterwards. Dr Miles' Anti-Pain Pills relieve quickly; no bad after-effects; no nausea. Just a pleasurable sense of relief. It won't cost you much to try them. Every druggist sells them.

"I recommended Dr. Miles' Anti-Pain Pills to sufferers of headache. They are the only thing I have ever found that would bring relief without affecting my heart."

ED. FADER, Lakeland, Minn.
If they fail to help, your druggist will refund the money on first package. 25 doses, 25 cents. Never sold in bulk.
MILES MEDICAL CO., Elkhart, Ind

Directory of Breeders' Associations

The following list comprises the name of every live stock breeders' association in the United States, of which we have record. The name and address of secretary will also be found in every case. If any associations of this kind are not listed, we ask that secretaries notify us at once, and also notify us at once as to any change in names and addresses. It will be the intention to keep this list up to date, and we ask for the co-operation of secretaries to that end.

Cattle Breeders.

American Aberdeen-Angus Breeders' Association—Thomas McFarlane, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Branch Association of the North Holland Herd Book—N. F. Sluiter, Brooklyn, N. Y., Secretary.
American Devon Cattle Club—L. P. Sisson, Newark, O., Secretary.
American Galloway Breeders' Association—Chas. Gray, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

American Guernsey Cattle Club—W. H. Caldwell, Peterboro, N. H., Secretary.

American Hereford Breeders' Association—C. R. Thomas, Stock Yards, Kansas City, Mo., Secretary.

American Jersey Cattle Club—J. J. Hemmingsway, New York, Secretary.

American Noarmandy Herd Book Association—E. G. Kramer, New York, Secretary.

American Polled Durham Breeders' Association—Fletcher S. Hines, Indianapolis, Ind., Secretary.

American Simmental Herd Book Association—E. G. Kramer, New York, Secretary.

American Short-Horn Breeders' Association—John W. Groves, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

American Sussex Breeders' Association—Overton Lea, Nashville, Tenn., Secretary.

Ayrshire Breeders' Association—C. M. Winslow, Brandon, Vt., Secretary.
Breeders' Association of French-Canadian Cattle of the United States—W. J. D. Connor, Binghamton, N. Y., Secretary.

Brown Swiss Cattle Breeders' Association—N. S. Fish, Groton, Conn., Secretary.

Dutch Belted Cattle Association of America—H. B. Richards, Easton, Pa., Secretary.

Holstein-Friesian Association of America—F. L. Houghton, Brattleboro, Vt., Secretary.

Maine State Jersey Cattle Association—N. R. Pike, Winthrop, Maine, Secretary.

National Polled Hereford Breeders' Association—A. E. White, Chicago, Secretary. 5629 Madison Ave.
Red Polled Cattle Club of America (Incorporated)—Harley A. Martin, Gotham, Wisconsin, Secretary.

Horse Breeders.

American Association of Importers and Breeders of Belgian Draft Horses—J. D. Connor, Jr., Wabash, Indiana, Secretary.

American Breeders' Association of Jacks and Jennets—J. W. Jones, Columbia, Tenn., Secretary.

American Clydesdale Association—R. B. Ogilvie, Union Stock Yards, Chicago, Secretary.

American Hackney Horse Society—A. H. Godfrey, New York, Secretary.

Percheron Society of America—Geo. W. Stubbs, Union Stock Yards, Chicago, Secretary.

American Saddle Horse Breeders' Association—I. E. Nail, Louisville, Ky., Secretary.

American Shetland Pony Club—Mortimer Levering, Lafayette, Indiana, Secretary.

American Shire Horse Breeders' Association—Charles Burgess, Wenona, Ill., Secretary.

American Stud Book (Thoroughbreds)—James E. Wheeler, N. Y., Registrar.

American Trotting Register Co.—W. H. Knight, Chicago, Secretary.

American Suffolk Horse Association—Alexander Galbraith, Janesville, Wis., Secretary.
Cleveland Bay Society of America—R. P. Stericker, West Orange, N. J., Secretary.
French Coach Horse Society of America—Duncan E. Willett, 2112 Michigan Ave., Chicago, Secretary.
German Hanoverian and Oldenburg

Coach Horse Breeders' Association—J. Crouch, Lafayette, Ind., Secretary.
Morgan Horse Register—Joseph Battel, Middlebury, Vt., Editor.
National French Draft Horse Association—C. E. Stubbs, Fairfield, Iowa, Secretary.
Oldenburg Coach Horse Association of America—C. E. Stubbs, Fairfield, Iowa, Secretary.

Sheep Breeders.

American Angora Goat Breeders' Association—John W. Fulton, Kansas City, Mo., Secretary.

American Cheviot Sheep Society—F. E. Dawley, Fayetteville, N. Y., Secretary.

American Cotswold Association—Frank W. Harding, Waukesha, Wis., Secretary.

American Leicester Breeders' Association—A. J. Temple, Cameron, Ill., Secretary.

American Milch Goat Record Association—W. A. Shafer, Hamilton, O., Secretary.

American Oxford Down Association—W. A. Shafer, Hamilton, O., Secretary.

American Rambouillet Sheep-Breeders' Association—Dwight Lincoln, Milford Center, O., Secretary.

American Shropshire Registry Association—Mortimer Levering, Lafayette, Ind., Secretary.

American Southdown Breeders' Association—Frank S. Springer, Springfield, Ill., Secretary.

American Suffolk Flock Registry Association—George W. Franklin, Des Moines, Iowa, Secretary.

American Tunis Sheep-Breeders' Association—Charles Roundtree, Crawfordville, Ind., Secretary.

Black-Top Spanish Merino Sheep-Breeders' Publishing Association—R. P. Berry, Clokey, Pa., Secretary.

Continental Dorset Club—Joseph E. Wing, Mechanicsburg, O., Secretary.

Dorset Horn Breeders' Association of America—M. A. Cooper, Washington, Pa., Secretary.

Franco-American Merino Sheep-Breeders' Association—John P. Ray, Haselock, N. Y., Secretary.

Hampshire Down Breeders' Association of America—C. A. Tyler, Nottawa, Mich., Secretary.

The International Lincoln Society—H. A. Daniels, Chicago, Ill., Secy.

Improved Black-Top Delaine Merino Sheep-Breeders' Association—O. M. Robertson, Eaton Rapids, Mich., Secretary.

Improved Delaine Merino Sheep-Breeders' Association—George A. Henry, Bellefontaine, O., Secretary.

International Delaine Merino Sheep Record—U. C. Brouse, Kendallville, Ind., Secretary.

International Union of Homeyer Rambouillet Club—E. M. Moore, Orchard Lake, Mich., Secretary.

Interstate and International Polled Dickinson Register—H. G. McDowell, Canton, O., Secretary.

Michigan Merino Sheep Breeders' Association—E. N. Ball, Hamburg, Mich., Secretary.

National Delaine Merino Sheep-Breeders' Association—John B. McClelland, Cannonsburg, Pa., Secretary.

National Lincoln Sheep-Breeders' Association—Bert Smith, Charlotte, Mich., Secretary.

National Merino Sheep Register Association—R. O. Logan, California, Mich., Secretary.

National Shropshire Record Association—S. J. Weber, Middleville, Mich., Secretary.
New York State American Merino Sheep-Breeders' Association—J. Horatio Earl, Skaneateles, N. Y., Secretary.
Standard American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.
Standard Delaine Spanish Merino Sheep-Breeders' Association—S. M. Cleaver, West Brownsville, Pa., Secretary.

United States Merino Sheep Registry Association—J. A. B. Walker, Mount Air, Pa., Secretary.
Vermont Merino Sheep-Breeders' Association—C. A. Chapman, Ferrisburg, Vt., Secretary.

Swine Breeders.

American Berkshire Association—Frank S. Springer, Springfield, Ill., Secretary.

American Duroc-Jersey Swine Breeders' Association—S. E. Morton, Camden, O., Secretary.

American Essex Association—F. M. Stout, McLean, Ills., Secretary.
American Poland-China Record Co.—W. M. McFadden, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

American Tamworth Swine Record Association—E. N. Ball, Hamburg, Mich., Secretary.

American Hampshire (Thin-Rind) Swine Record Association—E. C. Stone, Armstrong, Ill., Secretary.

American Yorkshire Club—H. G. Krum, White Bear Lake, Minn., Secretary.

National Poland-China Record Co.—A. M. Brown, Winchester, Ind., Secretary.

International Record Association Co.—H. A. Jones, Penn Yan, N. Y., Secretary. International for all breeds and countries.

Cheshire Swine-Breeders' Association—R. B. Radger, Oauquaga, N. Y., Secretary.

Improved Small Yorkshire Club of America—F. B. Stewart, Espeyville, Pa., Secretary.

National Berkshire Record Association—E. K. Morris, Indianapolis, Ind., Secretary.

National Chester White Record Association—Thomas Sharpless, West Chester, Pa., Secretary.

National Duroc-Jersey Record Association—H. C. Sheldon, 604 Main St., Peoria, Illinois, Secretary.

O. I. C. Swine Breeders' Association—C. M. Hiles, Cleveland, O., Secretary.

Southwestern Poland-China Record Association—H. P. Wilson, Gadsden, Tenn., Secretary.

Standard Chester White Record Association—W. H. Morris, Indianapolis, Ind., Secretary.

Standard Poland-China Record Co.—George P. Woodworth, Maryville, Mo., Secretary.

United States Small Yorkshire Association—D. T. Bascom, California, Mich., Secretary.

Victoria Swine-Breeders' Association—H. Davis, Dyer, Ind., Secretary.

American Chester White Record Association, Earnest Freigau, Dayton, Ohio, Secretary.

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CHESTER WHITES

Have some extra choice Fall pigs, both sexes. If you are looking for good ones write me. Barred Plymouth Rocks, best strains. Birds for sale. Eggs in season.

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SPRING PIGS CHESTER WHITES



Bred right, Fed right, Priced right, Come and see them, as good as any herd in Penna. Can please you.

J. H. YARNALL, Kelton, Pa.

Bargains in Poland-Chinas, Berkshires & Chester Whites

I now have a large stock of probably the best 1 ever owned. Cannot tell you all here, but I have Boars and Sows, all breeds, to 6 months old, bred and boars ready for sale. Calves and Registered Cattle Puppies. Write for prices. This stock must go and will be sold at a sacrifice. M. B. Turkey, Barred and White Pigs, Brown Leghorns for sale.

P. F. HAMILTON, Cochranville, Pa.



The Secretaries Corner

The Forty-third Annual Convention of the National Wool Growers' Association will be held at Salt Lake City, Utah, on January 17, 18 and 19, 1907.

Harry G. Krum, Secretary American Yorkshire Record, sent us the annual published by the association. It is full of information, not only to Yorkshire breeders, but to all hog raisers. Every one should have a copy. For address see directory in this paper.

The American Devon Cattle Club sends us a copy of their year book containing a record of all animals recorded during 1905, together with a mass of information about the little red cow. The book can be had for 25 cents and it should be in the hands of every one interested in dairy cattle.

The American Hereford Cattle Breeders' Association held their annual meet October 10th, and elected Calvin Cameron, of Arizona, President; Robert H. Hazlett, of Kansas, Vice-President, and C. R. Thomas, of Kansas City, Mo., Secretary.

The report of the secretary shows the association in a harmonious and flourishing condition.

The American Royal Live Stock Show closed a very successful meeting, from October 8 to 13, inclusive. The exhibition included Hereford, Shorthorn, Polled-Angus and Galloway Cattle, Percheron, Clydesdale, Shire, Hackney, and Shetland horses, Poland-China, Duroc-Jersey, O. I. C. and Berkshire hogs, Sheep and Angora goats. The attendance was 6,000 people. There was also a public sale of 60 Herefords, 50 Shorthorns, 50 Angus and 50 Galloways, about one-half bulls and one-half females. Average on Herefords, \$193; Shorthorns, \$190; Angus, \$98; Galloways, \$98.

The American Breeders' Association will hold its regular winter meeting at Columbus, Ohio, January 15-18, 1907. The daily sessions are scheduled to take place at the University and Board of Trade buildings through the hospitality of the Ohio State Board of Agriculture, the State University and the Ohio agricultural and plant breeding societies.

The American Breeders' Association has organized over forty committees composed of the leading workers and investigators in the fields delegated to them. The report of these committees will be a prominent feature of the program at Columbus. Able speakers and those who have done things in breeding animals and plants will also make the meeting attractive and a large attendance from all parts of America is assured.

The association has issued two reports, Volumes I and II, which are sent post-paid to all members. Annual membership in North America is \$1.00; foreign, \$2.00; and life membership is \$20.00. For associations and institutions life membership is limited to 25 years. There are now a thousand annual members and 42 life members.

Guernsey Breeders' Meeting—The Eastern Guernsey Breeders' Association met on September 13th with T. W. and I. W. Roberts, at "Pencoyd Farm," Bala, Pa. The members and guests assembled about 11 a. m. and spent a couple of hours inspecting the buildings and the fine herd of Guernsey.

sees. Two splendid bulls, Glenwood's Mainstay 16th and Golden Secret of Lilyvale, were much admired and there was a good deal of difference of opinion as to which was the better one.

At 1 p. m. lunch was served under a great tent, after which the meeting was called to order by 1st Vice-President Frank E. Patterson. Thirty members responded to their names when the roll was called. The minutes were read and approved. M. T. Phillips, of Pomeroy, was elected a member of the Association.

The speaker of the day, Dr. Leonard Pearson of the Pennsylvania Livestock Sanitary Board, was introduced at this point and read a most valuable paper upon, "The Vaccination of Cattle Against Tuberculosis."

When the Doctor had finished he was given a hearty vote of thanks. With the permission of the writer, the secretary was instructed to have the paper published in pamphlet form.

The meeting adjourned, several fine 2-year-old heifers were led up and occupied the attention of the breeders for some time; they then went back to the barn for a final look at the cows before they departed for the train. M. M. Hollinsworth, Sec.

Great Swine Breeders' Meeting. Secretary W. M. McFadden writes us as follows:

I want to call the attention of breeders to the coming meeting of the American Poland-China Record Association, which will be held in Chicago during the International Stock Show. The date for this meeting is Thursday, Dec. 6. The meeting will be held in the Live Record Building, in the assembly hall provided for such meetings. The great interest manifested in this meeting by breeders I have met at the various state fairs convinces me that the attendance will be good, and that for the first time in the history of Poland-Chinas we will have a meeting of breeders that will be thoroughly representative and national in its character.

I expect to make definite announcement of the date and arrangements in the November issue of The Swineherd, but thought it advisable to call the attention of those interested to the coming meeting at this time, so that they could arrange to attend the International Stock Show and the American Record meeting. This will be quite an important meeting from the standpoint of Record affairs, as a complete set of officers are to be elected. The reorganization affected last spring the officers elected were to serve only until the first meeting of the stockholders, to occur in December.

The business of the American Record is rapidly growing and we are getting new business almost every day from new patrons and in territory that formerly sent the American Record very little business. One of the most remarkable things in connection with the business is the unusually large inquiry for stock. Evidently the fact that we sell a share for \$20, which carries with it an interest in the surplus, amounting at the present time to over \$12, is considered a good investment, looking at the matter from a purely business standpoint. The remarkable growth of the business of

the Record indicates that our surplus will certainly get larger from year to year. The Record has always been careful to keep all its shares bought up from members who have gone out of the business, so that it is never any trouble to get cost price for a share of stock in the American Record.

Most members find the volumes a very great convenience. The first volumes which we issue every year each contain more than 1,000 pages. They are sent to all stockholders who ask for them, with all charges prepaid. I suppose these are some of the considerations that make the inquiry for stock so unusually large. A great many new breeders no doubt identify themselves with this record because of the fact that it is the largest swine Record in the world and is exceeded in amount of business by only one Record for any kind of live stock.

A great many patrons write me to express their high appreciation of the certificates of registry we issue. These are not only very extended, but enable the holder to give a complete breeding of his animals without waiting for the printed volume. No Record in the country issues, without charge, anything like as long a certificate of registry as does the American Record. Unless pedigrees require some correspondence to complete them, certificates of registry are sent within a very few days after the pedigrees reach the office. For some time past certificates of registry have been leaving the office within a week of the time the pedigrees were received.

The handling of the large volume of business in this manner evidently meets the hearty approval of breeders generally. Nothing so well illustrates this approval as the steady and remarkable increase in business from year to year. Those who may not be thoroughly posted on the Record and its methods of transacting business should write for blanks and information to the secretary, addressing him W. M. McFadden, Union Stock Yards, Chicago, Ill.

Headache

Want to know how to stop it? Of course you do—but you don't want to take anything that will injure you, or cause distress afterwards. Dr Miles' Anti-Pain Pills relieve quickly; no bad after-effects; no nausea. Just a pleasurable sense of relief. It won't cost you much to try them. Every druggist sells them.

"I recommended Dr. Miles' Anti-Pain Pills to sufferers of headache. They are the only thing I have ever found that would bring relief without affecting my heart."

ED. FADER, Lakefield, Minn.
If they fail to help, your druggist will refund the money on first package. 25 doses, 25 cents. Never sold in bulk.
MILES MEDICAL CO., Elkhart, Ind.

Directory of Breeders' Associations

The following list comprises the name of every live stock breeders' association in the United States, of which we have record. The name and address of secretary will also be found in every case. If any associations of this kind are not listed, we ask that secretaries notify us at once, and also notify us at once as to any change in names and addresses. It will be the intention to keep this list up to date, and we ask for the co-operation of secretaries to that end.

Cattle Breeders.
American Aberdeen-Angus Breeders' Association—Thomas McFarlane, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Branch Association of the North Holland Herd Book—N. F. Sluiter, Brooklyn, N. Y., Secretary.
American Devon Cattle Club—L. P. Sisson, Newark, O., Secretary.
American Galloway Breeders' Association—Chas. Gray, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Guernsey Cattle Club—W. H. Caldwell, Peterboro, N. H., Secretary.

American Hereford Breeders' Association—R. Thomas, Stock Yards, Kansas City, Mo., Secretary.
American Jersey Cattle Club—J. J. Hemingway, New York, Secretary.
American Noarmandy Herd Book Association—E. G. Kramer, New York, Secretary.

American Polled Durham Breeders' Association—Fletcher S. Hines, Indianapolis, Ind., Secretary.
American Simmental Herd Book Association—E. G. Kramer, New York, Secretary.

American Short-Horn Breeders' Association—John W. Groves, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

American Sussex Breeders' Association—Overton Lea, Nashville, Tenn., Secretary.

Ayrshire Breeders' Association—C. M. Winslow, Brandon, Vt., Secretary.
Breeders' Association of French-Canadian Cattle of the United States—W. J. McMurphy, Binghamton, N. Y., Secretary.

Brown Swiss Cattle Breeders' Association—N. S. Fish, Groton, Conn., Secretary.
Dutch Belted Cattle Association of America—H. B. Richards, Easton, Pa., Secretary.

Holstein-Friesian Association of America—F. L. Houghton, Brattleboro, Vt., Secretary.
Maine State Jersey Cattle Association—N. R. Pike, Winthrop, Maine, Secretary.

National Polled Hereford Breeders' Association—A. E. White, Chicago, Secretary, 5629 Madison ave.
Red Polled Cattle Club of America (Incorporated)—Harley A. Martin, Gotham, Wisconsin, Secretary.

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American Association of Importers and Breeders of Belgian Draft Horses—J. D. Connor, Jr., Wabash, Indiana, Secretary.
American Breeders' Association of Jacks and Jennets—J. W. Jones, Columbia, Tenn., Secretary.

American Clydesdale Association—R. B. Ogilvie, Union Stock Yards, Chicago, Secretary.
American Hackney Horse Society—A. H. Godfrey, New York, Secretary.

Percheron Society of America—Geo. W. Stubblefield, Union Stock Yards, Chicago, Secretary.
American Saddle Horse Breeders' Association—L. E. Nall, Louisville, Ky., Secretary.

American Shetland Pony Club—Mortimer Levering, Lafayette, Indiana, Secretary.
American Shire Horse Breeders' Association—Charles Burgess, Wenona, Ills., Secretary.

American Stud Book (Thoroughbreds)—James E. Wheeler, N. Y., Registrar.
American Trotting Register Co.—W. H. Knight, Chicago, Secretary.

American Suffolk Horse Association—Alexander Galbraith, Janesville, Wis., Secretary.
Cleveland Bay Society of America—R. F. Stericker, West Orange, N. J., Secretary.

French Coach Horse Society of America—Duncan E. Willett, 2112 Michigan ave., Chicago, Secretary.
German Hanoverian and Oldenburg

Coach Horse Breeders' Association—J. Crouch, Lafayette, Ind., Secretary.
Morgan Horse Register—Joseph Battel, Middlebury, Vt., Editor.
National French Draft Horse Association—C. E. Stubbs, Fairfield, Iowa, Secretary.
Oldenburg Coach Horse Association of America—C. E. Stubbs, Fairfield, Iowa, Secretary.

Sheep Breeders.
American Angora Goat Breeders' Association—John W. Fulton, Kansas City, Mo., Secretary.

American Cheviot Sheep Society—F. E. Dawley, Fayetteville, N. Y., Secretary.
American Cotswold Association—Frank W. Harding, Waukesha, Wis., Secretary.

American Leicester Breeders' Association—A. J. Temple, Cameron, Ills., Secretary.
American Milch Goat Record Association—W. A. Shafer, Hamilton, O., Secretary.

American Oxford Down Association—W. A. Shafer, Hamilton, O., Secretary.
American Rambouillet Sheep-Breeders' Association—Dwight Lincoln, Milford Center, O., Secretary.

American Shropshire Registry Association—Mortimer Levering, Lafayette, Ind., Secretary.
American Southdown Breeders' Association—Frank S. Springer, Springfield, Ills., Secretary.

American Suffolk Flock Registry Association—George W. Franklin, Des Moines, Iowa, Secretary.
American Tunis Sheep-Breeders' Association—Charles Roundtree, Crawfordsville, Ind., Secretary.

Black-Top Spanish Merino Sheep-Breeders' Publishing Association—R. P. Berry, Clokey, Pa., Secretary.
Continental Dorset Club—Joseph E. Wing, Mechanicsburg, O., Secretary.

Dorset Horn Breeders' Association of America—M. A. Cooper, Washington, Pa., Secretary.
Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.

Hampshire Down Breeders' Association of America—C. A. Tyler, Nottawa, Mich., Secretary.
The International Lincoln Society—H. A. Daniels, Clio, Michigan, Sec'y.

Improved Black-Top Delaine Merino Sheep-Breeders' Association—O. M. Robinson, Eaton Rapids, Mich., Secretary.
Improved Delaine Merino Sheep-Breeders' Association—George A. Henry, Bellefontaine, O., Secretary.

International Delaine Merino Sheep Record—U. C. Brouse, Kendallville, Ind., Secretary.
International Union of Homeymer Rambouillet Club—E. M. Moore, Orchard Lake, Mich., Secretary.

Interstate and International Polled Dickinson Register—H. G. McDowell, Canton, O., Secretary.
Michigan Merino Sheep Breeders' Association—E. N. Ball, Hamburg, Mich., Secretary.

National Delaine Merino Sheep-Breeders' Association—John B. McClelland, Cannonsburg, Pa., Secretary.
National Lincoln Sheep-Breeders' Association—Bert Smith, Charlotte, Mich., Secretary.

National Merino Sheep Register Association—R. O. Logan, California, Mich., Secretary.
National Shropshire Record Association—S. J. Weber, Middleville, Mich.

New York State American Merino Sheep-Breeders' Association—J. Horatio Earl, Skaneateles, N. Y., Secretary.
Standard American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.

Standard Delaine Spanish Merino Sheep-Breeders' Association—S. M. Cleaver, West Brownsville, Pa., Secretary.
United States Merino Sheep Registry Association—J. A. B. Walker, Mount Air, Pa., Secretary.

Vermont Merino Sheep-Breeders' Association—C. A. Chapman, Ferrisburg, Vt., Secretary.

Swine Breeders.
American Berkshire Association—Frank S. Springer, Springfield, Ills., Secretary.
American Duroc-Jersey Swine Breeders' Association—S. E. Morton, Camden, O., Secretary.

American Essex Association—F. M. Stout, McLean, Ills., Secretary.
American Poland-China Record Co.—W. M. McFadden, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

American Tamworth Swine Record Association—E. N. Ball, Hamburg, Mich., Secretary.
American Hampshire (Thin-Rind) Swine Record Association—E. C. Stone, Armstrong, Ill., Secretary.

American Yorkshire Club—H. G. Krum, White Bear Lake, Minn., Secretary.
National Poland-China Record Co.—A. M. Brown, Winchester, Ind., Secretary.

International Record Association Co.—H. A. Jones, Penn Yan, N. Y., Secretary. International for all breeds and countries.
Cheshire Swine-Breeders' Association—R. B. Radger, Oauquaga, N. Y., Secretary.

Improved Small Yorkshire Club of America—F. B. Stewart, Espesville, Pa., Secretary.
National Berkshire Record Association—E. K. Morris, Indianapolis, Ind., Secretary.

National Chester White Record Association—Thomas Sharpless, West Chester, Pa., Secretary.
National Duroc-Jersey Record Association—H. C. Sheldon, 604 Main St., Peoria, Illinois, Secretary.

O. I. C. Swine Breeders' Association—C. M. Hiles, Cleveland, O., Secretary.
Southwestern Poland-China Record Association—H. P. Wilson, Gadsden, Tenn., Secretary.

Standard Chester White Record Association—W. H. Morris, Indianapolis, Ind., Secretary.
Standard Poland-China Record Co.—George F. Woodworth, Maryville, Mo., Secretary.

United States Small Yorkshire Association—D. T. Bascom, California, Mich., Secretary.
Victoria Swine-Breeders' Association—H. Davis, Dyer, Ind., Secretary.

American Chester White Record Association, Earnest Freigau, Dayton, Ohio, Secretary.

50 cents per year; 3 years \$1.00.

ENON HERD CHESTER WHITES

Have come extra choice Fall pigs both sexes. If you are looking for good ones write me: Barred Plymouth Rocks, best straws. Birds for sale. Eggs in season.

D. W. SHELLABARGER, - ENON, OHIO

SPRING PIGS CHESTER WHITES

Bred right, Fed right, Priced right, Come and see them, as good as any herd in Penna. Can please you.

J. H. YARNALL, Keltton, Pa.

Bargains in Poland-Chinas, Berkshires & Chester Whites

I now have a large stock of probably the best I ever owned. Cannot tell you all here, but I have Hogs and Sows, all breeds, to 6 months old.

old sows and pigs bred and raised ready for service, Guernseys, Calves and Registered Pure-bred Puppies. Write for prices. I am a breeder, and my stock must go and will be sold at a low price. M. B. Turkey, Barred and White Pigs, Brown Leghorns for sale.

P. F. HAMILTON, Cochranville, Pa.

HOG CHOLERA

The Problem of a Cure is now Solved

Dr. J. H. Snoddy, of Alton, Ill., has discovered a positive cure and preventive for this terrible disease. He has had it in use for ten years and has saved millions of dollars' worth of cholera hogs for the public. The directions for its use are simple and easy to follow. Any practical farmer can stop the worst outbreaks of cholera that ever come and save every hog that is able to take the treatment.

The following breeders and well known hog raisers have tried the remedy and recommend it highly. T. T. Schouler, Supt, City Home Farm, Worcester, Mass; J. E. Hendrickson, Commission Merchants, Philadelphia, Pa. and Dr. David Alkire, of Marco, Ind., and many others.

Dr. Snoddy has published a small booklet that gives full directions and tells all about it. This little booklet will be mailed free to every person who will write for it. Every farmer and hog raiser should write at once for one of these little booklets. They are free, Address

THE SNODDY REMEDY Co., Box 290, ALTON, ILL.

Breeding Mares

One reason why the percentage of foals born on farms is not larger is that farmers in the breeding season neglect to see to it that their mares are tried regularly, says a writer in the Farmers' Advocate. It may seem to some to be much trouble and perhaps a waste of time to stop some important work and go and have the mare tried, but the fact remains that not to take the mare regularly on that errand is a losing policy for which there is no defense. We do not believe in running the mare to be tried every few days after she is bred, but we do know that it is always well to consult the wishes of the owner of the horse with which she has been mated. If this rule is to have the mare returned for trial on a stated day, then she should be brought back on that day. Some mares are such kindly and regular producers that they get with foal at the first service each season for a term of years, so that it seems a waste of time to have them tried. In such cases, however, it invariably happens, sooner or later, that she misses, and then the owner inveighs against his carelessness in not attending to his business.

Everyone knows that just at the present time horses are the most valuable and profitable animals reared on the farm. It seems likely, moreover, that this condition will endure for many years. Therefore, the man is foolish who neglects any point in the game. Every brood mare on a farm that does not produce a colt is so much dead timber, and even if she does her work and earns her keep she is not producing the profits which may reasonably be expected from her. If a mare is simply kept for the foals she may bring into the world, and goes over a year, she is nothing but a bill of expense for the time being.

But in any case, the failure to try mares as they should be tried is merely work half done and we all know what the results are, as a rule, in the end. If it is worth while to breed a mare once it is just as well

worth while to return her, provided that some worthy reason does not later develop why she should not be. Merely to fail to take her to the appointed trysting place on the plea of being busy is very poor business policy. Suppose the corn is weedy and the weather has been wet. To stop for half a day means to lose that much time in going over a few acres at most. To keep on may mean not alone to let the mare go over barren for a year, but may also start her out in bad habits and cause her to become hard to get with foal afterwards. There is no defense to be made to the failure to try mares.

And another thing: If the owner of the mare agrees with the owner of a stallion to return her at a stated time and place, that constitutes a binding agreement, and in the event of a dispute over the payment of the fee, might have a marked bearing on the outcome. In any case, an agreement is an agreement, and if the owner of the mare cares nothing for his own financial welfare he should at least respect his word. The business of standing stallions is a hard one at best, a disagreeable one at all times, with lines cast in thorny paths. To make a profitable season the man handling the horse must arrange his business in a businesslike manner, and he cannot do that if he cannot depend on the return of the mares when promised.

MILK STANDARDS.

It is surprising as well as encouraging to observe that intelligent students of the milk business are being converted rapidly to the views of The New York Farmer concerning state standards for milk. No sooner does an intelligent man begin to study the state butterfat standard in all its bearings upon the producers, the middlemen and the consumers, than he arrives at the conclusion that such a standard, unscientific and unnatural in itself because of the wide range of butterfat content in pure milk is a safeguard to the dishonest middlemen, and a burden upon the

producers, while achieving nothing of importance for the consumer. Along with the very rapid spread of this opinion is seen the spread of the idea that milk should be sold on a sliding scale of prices, based upon its contents of butterfat and other solids. With the Babcock tester it is possible to sell all milk on the butterfat basis and thus do away at once with all, or nearly all, of the vexatious questions that are connected with the milk business. No other conceivable way of selling would so quickly do away with so many perplexing problems.

Law is like a ground glass window; it may let in a little light but no one on earth can see through it. "Going to law" is a habit with some men. Very often nothing is accomplished except to make a lifelong enemy of a neighbor, and perhaps sow the seeds of a feud that will run through the ramifications of the entire family and become a household tradition.

When you have a point of disagreement don't rush off to a lawyer. Go to your neighbor like a man and talk it over; he will usually meet you half way. You seldom see a lawyer mixed up in a lawsuit of his own. He knows better.

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Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

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Write us fully stating your present occupation and experience with live stock- ADDRESS

International Consolidated Record Association

Penn Yan, New York

"Truth is Stranger Than Fiction"

To the Breeders and Farmers of America:

We invite your attention to the following items and a comparison of the statements concerning this association and assure you we shall be only too pleased to furnish you more of the same kind whenever we have the opportunity. "A Business Concern that is not worth talking about is n't worth much." Whenever you find any statements over the signature of any of the officers of I. C. R. A. such statements will be the TRUTH and NOTHING BUT THE TRUTH.

Whenever any of you find in any of the papers of this country anything pertaining to this Association of the character of the following, please mark the item and send us the paper entire by sealed mail at once and we will fully repay you.

From the BREEDERS GAZETTE, August 29, 1906.

Warns Against Certificates.

To the Gazette—At the recent annual meeting of this association, resolutions were passed informing the breeders generally that the concern calling itself the International Consolidated Record Association, and offering and purporting to issue certificates of registry of Holstein cattle, as well as other live stock, had no Holstein records sufficient to permit it to issue a certificate of registry nor could it obtain such sufficient information therefrom from the Holstein-Friesian Association of America, and that any such certificates issued by the International Consolidated records were without value and useless as certificates of registry. The certificates of registry of the Holstein-Friesian Association bear upon their face the signature of F. L. Houghton as secretary and the corporate seal printed thereon (embossed up to 1904) in yellow ink.

Brattleboro, Vt. F. L. Houghton, Secretary.

CAN YOU OR MR. HOUGHTON, Secretary, tell the public which statement is the TRUTH?

On the appearance of the above we wrote as follows:

Messrs Luther Tucker & Son,

Publishers Country Gentlemen, Albany, N. Y.

Our attention has been called to an article on page 779, 3d Col, issue 8, 23, '06 of your periodical; and signed by F. L. Houghton, Sec.; which we are informed is libelous and which is far from the truth. We are advised to write you and inquire: What are you going to do about this matter and immediately by way of retraction or otherwise? Unless we hear from you in ten days from this date that such retraction has been written with copy attached and will print in the following issue in conspicuous place that same may be satisfactory to all parties connected with us; we shall be compelled to seek redress and shall look to you to make good.

Yours truly, A. T. Angell, Pres. H. A. Jones, Sec'y. International Consolidated Record Association, Penn Yan, N. Y.

To this we received no reply and on the 14th of September we called at the tent of the Country Gentlemen on the Fair Grounds, Syracuse, and extended the time ten days. In the issue of C. G. of 9, 20, '06, page 877 appears the following:

Replying to a correspondent, we would say that certainly the "International Consolidated Record Association," has access (as has all the world) to the printed Holstein-Friesian Herd Book, and can trace pedigrees to that record and issue certificates to any owner or breeder who wants them. The recent notice of the secretary of the Holstein Association to the effect that "such certificates issued by the International Consolidated records are without value and useless as certificates of registry," meant, of course, that they are not recognized by the breeders association. They have the same value in establishing decent that any non-official statement of the facts would have. That is all there is about it.

This last reminds us of the "little boy, who had just been severely flogged." "He was awful sorry he had been naughty, but glad he had said what he had."

The sequel of this story is better told by sending to us for further information.

GET OUR RATES AND COMPARE WITH ANY SINGLE BREED ASSOCIATION AND BENEFITS. SEND US THE PEDIGREES OF ANY PURE-BRED LIVE STOCK: WE'LL SHOW THEM AND YOU. INTERNATIONAL CONSOLIDATED RECORD ASSOCIATION PENN YAN, NEW YORK

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The most notable facts of the Company are that it owns proven gold and silver bearing land; not only is the ore there, but it is there in quantities, an apparently inexhaustible supply of pay ore. The Company owns the Gregory Group of five Claims situated in the famous MANHATTAN DISTRICT, and also has several claims in the LONE MOUNTAIN DISTRICT: both these Districts are the richest in the WORLD. The tunnels have been opened up on the Lone Mountain claims and indications point to striking large bodies of high grade ore carrying values in Gold and Silver.

MINING HAS BUILT MANY GREAT FORTUNES

Nothing so surely offers large returns as a good Mining Stock. Probably you do not realize how many people there are who are enjoying a regular income as a result from investing in mining Stocks. There are thousands of them, and they are largely those who bought their stock when the opportunity was first offered to secure shares at a low price before the company had begun to pay dividends. Stocks of many mining companies have advanced from a few cents a share to prices ranging from \$100 to \$1500 a share in value, and besides have paid back to the investors in dividends many hundred times what they first invested. Many of the companies are paying from 100 per cent. to 1000 per cent. in dividends on the first price of the stock. To grasp this opportunity and purchase stock in the PITTSBURG-MANHATTAN MINING COMPANY at 10 CENTS a share means success to you; and that means houses, good living, travel, education and social privileges for your children. If you do not grasp this opportunity and secure a good share of wealth you are likely to be classed a failure. The proposition is in the hands of men whose ability and integrity cannot be questioned, and these men pledge themselves to see that each and every investor in the enterprise receives an equal division of the profits. Experts have examined the property, and it is the universal opinion that it has a wonderful future.

ORGANIZATION

The Company is organized under the laws of the state of Nevada, Capital stock of \$1,000,000, divided into 100,000 shares of the par value of \$1.00 each; 400,000 shares are in the treasury which will be sold as required or developments from time to time.

10c PER SHARE, CASH OR INSTALLMENTS

We want to impress upon you the fact that you don't have to be rich in order to become a share holder in this splendid Company. The price of shares is only 10 cents, and you can buy as few as one hundred (100), \$10.00 worth. If you are not in a position to pay cash for all the shares you desire to own we will accept a small payment down with the order, the remainder to be paid in five monthly installments. Suppose you want to invest \$10.00 in this company; simply send us \$2.50 with your order for 100 shares, and thereafter \$1.50 per month for five months and the stock will be paid for. It's very easy—anyone can afford to do this. Almost any one has enough money in a year to buy them an interest in this Company which would make them independent for life. Send in your order today. The following table will show you just how many shares your money will buy, the amount you send if you want to pay cash, and the plan for monthly payments.

What Your Money Will Buy

100 shares \$	10.00 cash or \$	2.50 cash and \$	1.50 per month for 5 months
200 shares	20.00 cash or	5.00 cash and	3.00 per month for 5 months
300 shares	30.00 cash or	7.50 cash and	4.50 per month for 5 months
400 shares	40.00 cash or	10.00 cash and	6.00 per month for 5 months
500 shares	50.00 cash or	12.50 cash and	7.50 per month for 5 months
600 shares	60.00 cash or	15.00 cash and	9.00 per month for 5 months
800 shares	80.00 cash or	20.00 cash and	12.00 per month for 5 months
1,000 shares	100.00 cash or	25.00 cash and	15.00 per month for 5 months
2,000 shares	200.00 cash or	50.00 cash and	30.00 per month for 5 months
5,000 shares	500.00 cash or	125.00 cash and	75.00 per month for 5 months
10,000 shares	1,000.00 cash or	250.00 cash and	150.00 per month for 5 months

In offering this stock we present it as a solid and safe investment, not a speculation. The resources of their properties and the amount of rich ore seems so inexhaustible that We recommend the purchase of this stock to every investor.

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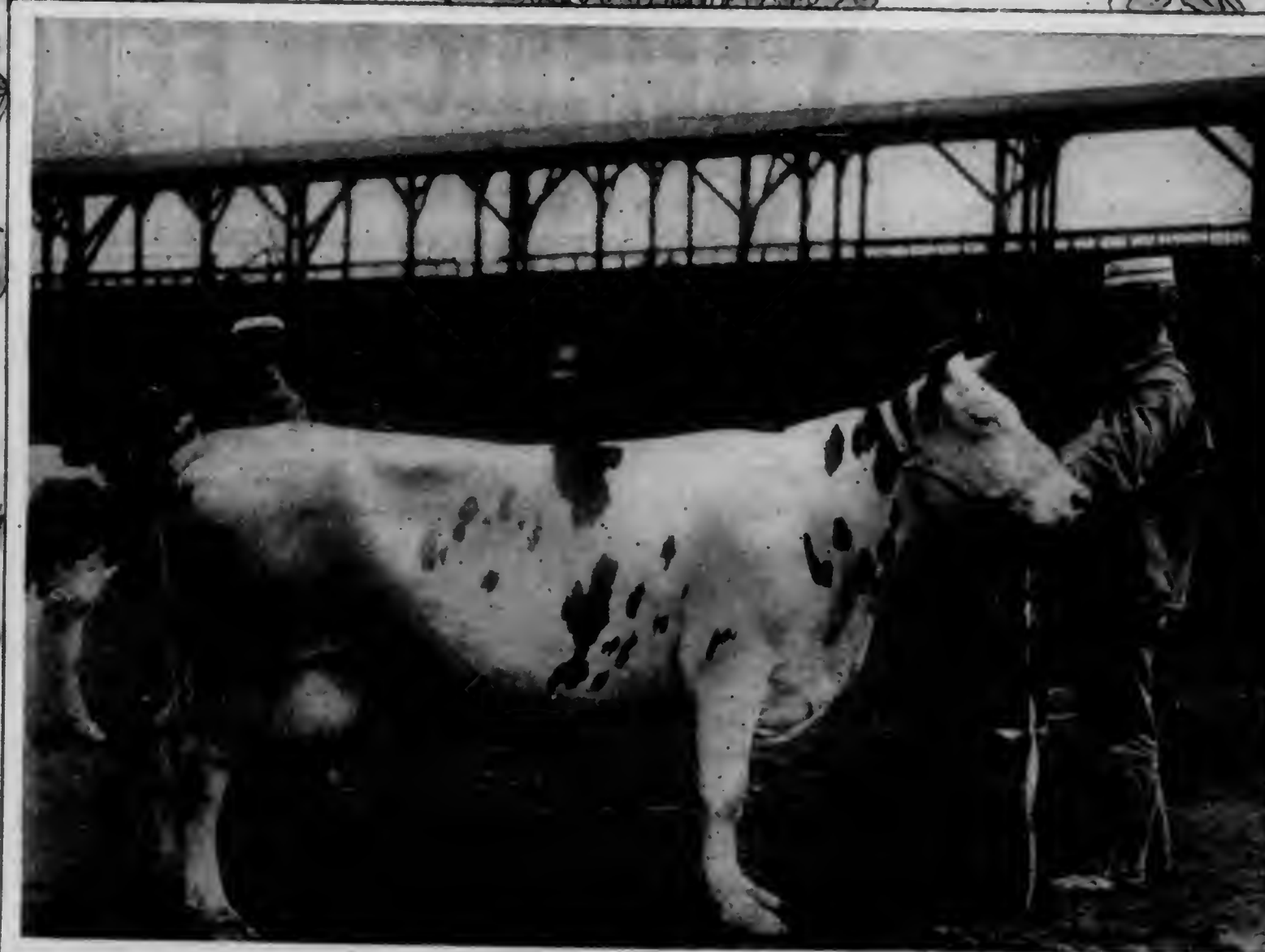
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BLOODED STOCK



ENSILAGE FOR DAIRY COWS.

A practical and successful dairyman gives his plan of feeding his cows through the Jersey Bulletin, and among other things he says: "We make ensilage our main food. It is unnecessary to enlarge upon the value of ensilage, for every dairyman in the corn belt certainly knows the value of this great feed. We feed from 30 to 50 pounds of ensilage per day in proportion to the cow. It is our intention for our cows to have all they want, and that it be in the best condition. In the winter the ensilage is not removed from the silo until feeding time and is fed steaming hot.

The ensilage ration is balanced with bran and clover hay. The bran is fed in proportion to the period of lactation of the cow, and as much as she will consume at a profit. We feed our ensilage and bran the first thing in the morning; then do our milking and separating; then feed as much clover hay as the cows will clean up before noon. The same method is followed in the evening, feeding hay the last thing at night.

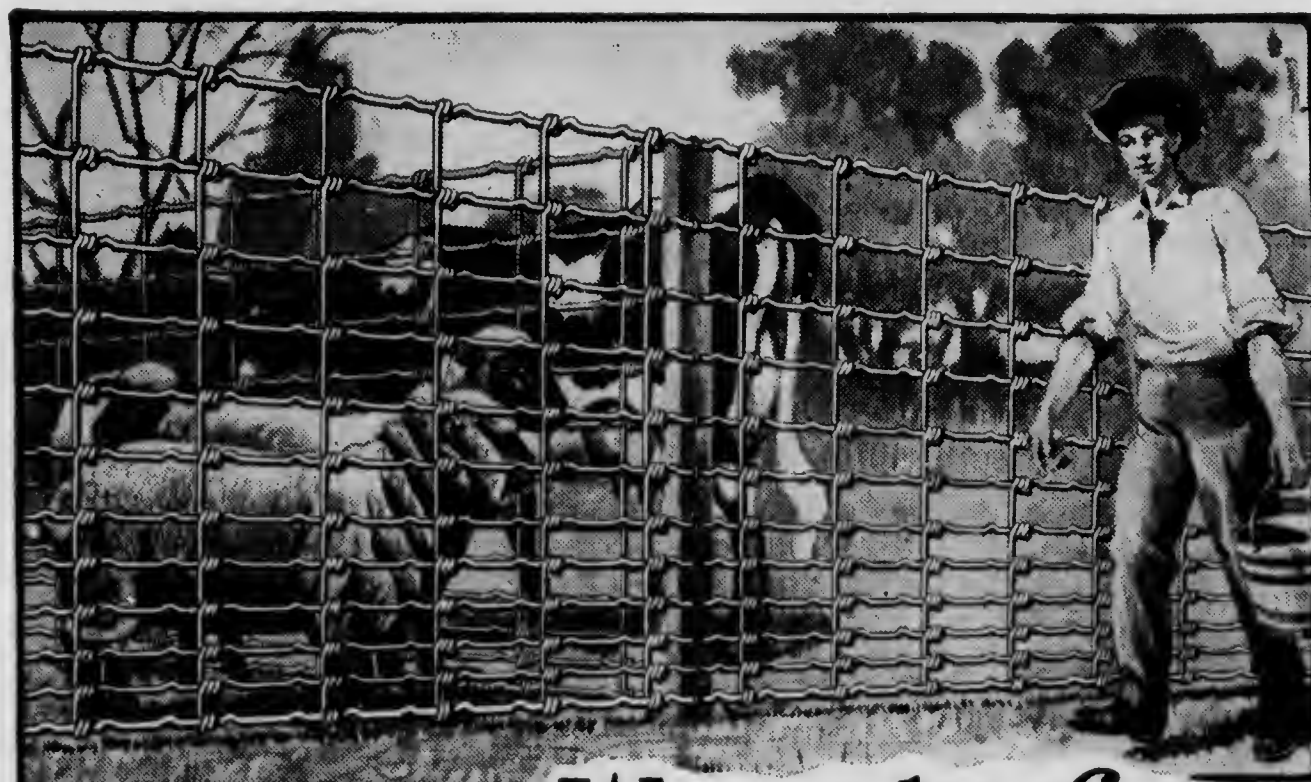
"We do not depend on grass alone more than sixty or seventy-five days in the year, from about May 10 to July 15 or 20. Then if we have the ensilage left over from winter, we feed about 20 to 25 pounds per day. If we have no ensilage, we plant a small plot of sweet corn early in the spring and begin feeding as soon as it is up, cutting from the field and hauling to the pasture each day. This is a more expensive way of feeding than the ensilage, but it is far better than to let the cows go hungry, for a hungry cow won't give milk. Our cows must have all they want to eat three hundred and sixty-five days each year."

NEED MODEL DAIRY FARMS.

Hoard's Dairyman urges the value of model dairy farms in the following strong argument. It says:

"A model dairy farm attached to a creamery could not fail of clearing an immense amount of fog out of the minds of patrons in this vicinity who are producing milk, practically, with their eyes shut. It is the sheerest nonsense to talk about the dairy intelligence of the average patron of creameries or cheese factories.

When the gross returns per cow are only \$30 to \$35 for the entire season, in a host of creameries, while in



We make fence better and better. Why?

Tell you why. The manufacturer that makes any article better than anyone else, sooner or later will enjoy the biggest trade in that article.

If he is wise, he will strive always to improve on the best, to keep it the best—to keep it the *biggest seller* in his line.

And because of his greater volume of sales, he can make improvements at less cost per gross, or ton, or rod, as the case may be.

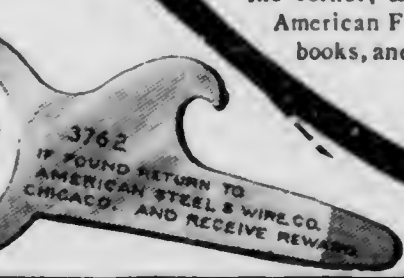
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Drop me a postal and tell me how much fence you will need this year. I will write you a personal letter about American Fence and send you this combination key-ring, screw-driver and bottle-opener.

SENT TO YOU FREE



NOTE—I want to send you the combination key-ring, shown in the corner, with our compliments, as a continual reminder of American Fence. We register your name and number on our books, and return keys, without cost, if found and sent us.

FRANK BAACKES
Vice-President and General Sales Agent
American Steel & Wire Co.
Chicago, U. S. A.

more enlightened communities the average will be as high as \$50 to \$60, what does that difference show? When in the same creamery, as we know in a multitude of instances, we find men making a profit over the cost of feed of only \$5 to \$10 per cow, while others are clearing \$20 to \$30, what does that difference show?

It shows in plain words the difference between dairy ignorance and of patrons do not seem capable of learning the right lessons from reasoning, for they will not read. They do not read the bulletins of the Experiment Stations, and we know that

they do not read the dairy papers or dairy literature of any kind. They do not travel and visit other men who use brains in the conduct of a dairy farm. How shall they get useful and progressive ideas into their heads? Such men learn only what they see. The example of one man in a neighborhood who demonstrates better methods is the only way such men can be reached."

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Dr. H. L. Patterson, President.

C. E. Morrison, Secretary and Treasurer.

THE PERSONAL SIDE. PROGRAM 1907

Special Prepared Subjects that will Appear in Blooded Stock During the Coming Year. Things that Every Progressive Farmer Should be Posted Upon

THE MODEL DAIRY COW—FORM AND PURPOSE

Breeds Best Adapted. How to Select and What She Should Do.

MILKING MACHINES.

What They Are, Their Development and What They Will Do for the Dairyman.

SEPARATORS ON THE FARM.

The Advantages to be Gained and Profit Saved. What is Required.

THE HORSE ON THE FARM.

How to Make the Most Out of Him—Combining Work, Profit and Pleasure.

MULE BREEDING.

The Demand, Supply and Profit.

SILOS AND ENSILAGE.

Cost of Erecting—Advantages to be Gained—Profit.

COW BARN.

Illustrated—Showing Plans and Conveniences.

GOAT GROWING.

What the Industry Is—Requirements—Returns.

ROOFING FOR FARM BUILDINGS.

Cost—How Applied—Help Necessary to Put On.

HOG HOUSES.

Plans Illustrated—Showing How and Giving Ideas.

SHEEP GROWING AND FEEDING.

How a Few Can Be Kept Profitably by Every Farmer.

GASOLINE ENGINES.

As a Farm Implement Can Be Used in Many Ways.

BEEF CATTLE BREEDS.

Selection—Age to Fatten—When to Market.

FARM POULTRY.

What to Keep—How to Care for—Its Place on the Farm.

These are Only a Few of the Many Valuable Things that will Appear in Blooded Stock that You Must Not Miss. Attend to your Subscription at Once if You Have Not Already Done So

Things to Think About

This Page Open to Any One Having Ideas to Discuss.

Talking about fairs the other day with a man who had been attending them year in and year out, the question was brought up as to what farmers gain from them and how many of the better class who attend the fairs ever gain anything from looking at the live stock exhibit. This man doubted whether one man out of a thousand ever stopped long enough to study why one animal won over the other. In many cases you will hear passers-by remark that they would rather have such and such an animal over the one on which the first premium had been awarded. Right here is where the great majority lose the value of this exhibition. Such occasions are the times when anyone wishing to learn can inquire of the Judge awarding the premiums as to why this animal won over the other, and if it was an honest award then the learner has an object lesson and the reason for the Judge so making the award.

While we may have such articles appear as on page 5 of the Nov. number, explaining many of these points, yet right in the show ring is the place to get a better knowledge of such points because you have both the good and bad side by side for comparison. The greater majority of Judges will be only too glad to point out these points to anyone who will ask for them if it is done when they are not too busy. Usually the men who know are always ready to explain any points that they may be asked about.

The time is at hand for the Farmers' Institutes and Club Meetings and we wish our readers to bring these subjects up for discussion. We know that it will be of great value to many and subjects that will be entered into with much spirit. When the opportunity occurs all hands can go to the barn and look for some of the points that have been mentioned and there will always be someone in the crowd who can give some valuable points to the others. Don't be afraid to ask questions.

In the November number we called attention to the matter of getting the stables in good condition so as to keep the stock warm and protected from do. It is rather costly if not done the right way, the cold and winds. If you have not done this see that it is attended to at once. You cannot afford on what sand, cement, boards and nails should ford to neglect this any longer. Don't waste your

The article on page 6 of the November number, by Mrs. A. F. Howie, is one that you should read the second time. There are many good points in it worthy of close attention. We might also say the same thing of the article on page 8. These two articles should be thoroughly considered by everyone as the results obtained from these two subjects go far towards making up the profits of the farm.

At every meeting you attend this winter get up the road question. The building of good roads is a science and but little has been done with it in this country. It will be years before it will become an active pursuit and express itself in work. In the meantime each individual can do much that will bring immediate results in his community. Why not apply a little more modern system in this work? Get your most progressive men together and map out your township and allot a certain portion of your road system to be improved each year. Your location and how near solid rock for foundation can be had, will depend much on the cost of the making of a solid road bed. The greatest object lesson any community can get as to improving roads is to be found in Delaware County, Pa., where A. J. Cassatt, President of the Pennsylvania Railroad, was elected supervisor several years ago and commenced building public roads on the same principle that he builds railroads, and the result of this road building has increased the wealth of his township ten times over, and today the finest roads in America are to be found at Bryn Mawr. Any township thinking of building improved highways will be well repaid to send a committee to Bryn Mawr and also to Avondale, in the adjoining County, where the new State highway has been built, where they can obtain all data on the spot. The expense of such a trip will be more than saved when the actual work commences.

In Central Siberia the proportion of horses to every hundred population is eighty-five and is excelled only by the Argentine Republic, where the rate is 112 horses to every hundred inhabitants. In the United States the proportion is twenty-two to the hundred, and in France only seven. It is estimated that in the region of the Trans-Siberian Railway alone there are something like three million horses. The average peasant horse is worth from 25s. to 30s. only, but those used in the post, which have enormous powers of endurance, cost from 2 pounds 10s. to 3 pounds. The finest horses are to be got in Siberia from 5 to 7 pounds.

Things to Think About.

Articles Discussed Under This Head
Open to Any of Our Readers.

DOES THE MALE SHOW any characteristic by which we can judge of his worth as a sire to improve the milking qualities of a herd? Every successful dairyman and expert dairy judge will say yes. And these qualities, easily read by the expert, has lost or gained the show many times, while the less careful observer thought the judge made a mistake in his awards. If this be true in the dairy breed why not true in other animals? Perhaps none of our domestic animals are called on more frequent or by so many hungry offspring as the prolific brood sow, hence the great importance to select both male and female strongly developed in points denoting good milking qualities. The diminutive teats and undeveloped udders, as well as the abnormal size, fleshy teat and udder should be avoided, but between these two extremes select well developed milk veins, udders and well placed, normal sized, teats.

N. P. Kerslmer, Ansonia, Ohio.

YOUR REMARKS about the milking qualities and their development among cattle and especially hogs, have been very interesting to me. This is especially so on the hog line and I feel that many of your readers will be benefited by these points. In reading these over I wish to ask you what you think of the form and shape in regards to the milking qualities of hogs? Do you think they can be developed along the same lines as in cattle? Would be glad to have your opinion on the subject.

A Subscriber.

THE QUESTION is one of greatest importance to the swine grower and probably has been given less thought than any point connected with the hog growing business. It would be far easier to point out by comparison in the show ring the difference in animals in respect

to form for milking strains than it is to tell the difference in a manner that the novice would understand.

When standing in front of a lot of pigs looking along the back notice that some were heavy shouldered, others the shoulder blades were closer together, making the shoulders look rather sharp on top. This pig, starting from the ears, grew wider until at a point each side of the tail, making a wedge, heavy end back. Take such a pig and then stand to one side and see that he has depth in heart, deep sides and a very low flank, so as to show the wedge again, the heavy end behind. It will only be the expert who will select such a hog but he will, at a year old, have a grand hog.

Such a pig possessing bone, vigor and the qualities mentioned before for milking, and you have a valuable breeding and show animal. At three to four months of age this pig will have a feminine appearance. The selection of such a pig is one of the breeders' arts and is a worthy aim for any man to accomplish. Those who succeed in learning get well repaid for the trouble and it is something that is worth trying. Give it your close attention.

The animal just described is also the one that makes the great show hog one sees at the fairs. Everyone has seen a great two-year-old hog or over that had the "big end behind," carrying the same width from shoulders to hams with full even sides. Such hogs are never the great heavy shouldered ones at four months of age. These heavy shouldered pigs at two years of age are wedge-shaped, but the big end is front. Head on the wrong end.

This close-shouldered, feminine hog, will be finer skinned and haired hog than the other. He will never have the thick mask on shoulders. This being the case great care should be taken that he is heavy boned. Do not allow this fineness to weaken the constitution.



Herefords Owned by Henry Watson, Edenberg, Indiana.

Variations in the Test of Cream

THE Dairy Department of the Kansas Agricultural College and Experiment Station has issued an interesting bulletin, 137, showing the causes of the variations in the tests of cream, and we give below a summary of the conclusions on this very interesting topic, namely:

"Any or all of the six chief causes for variation in the test of cream may occur on almost any farm and contribute to the differences which are seen on the creamery patrons' statements from time to time. Improper reading of the test may explain additional variations. We have not dealt with that, because it can be controlled by creamery inspectors and the law.

In the summer a cream separator is naturally warmer than it is in winter, and consequently during the winter months it cools several degrees, the first milk entering the bowl. Milk quickly cools off while standing in cold weather, and is usually separated at a lower temperature in winter than in summer. This is only a gradual variation, however, and is not very noticeable. There are several minor causes of variation, such as that of sudden starting, difference in quality of morning and evening milk, improper oiling, etc. The chief causes of variation, however, and the amount of variation in each case are as follows:

1. The temperature of milk makes a difference of from one to five per cent in the test of cream at average skim-

ming temperature, greater variation being caused in extreme cases.

2. The amount of flush water used with average skimming temperatures makes a difference of from one to three per cent., in extreme cases making difference as great as ten per cent.

3. The variation in steadiness of the bowl makes a difference of from two to sixteen per cent, depending on the amount of vibration.

4. The variation of the speed of the bowl causes a difference of from one to thirteen per cent in the test of cream, depending on the variation in speed.

5. The amount of milk allowed to flow through the separator bowl from one-half to full capacity makes a difference of from one to six per cent, depending upon the divergence from full capacity of the machine.

6. The amount of acid in the milk causes an irregular variation in the test of cream, depending upon the amount of acid it contains. Where the acid reaches a high point, .3 to .4 per cent for instance, and the separator is used continuously for an hour or more, it will eventually clog the same as in the case of cold milk. The cream will then become thicker until the separator is entirely clogged. The extent of the clogging will depend on the amount of acid in the milk and the size of the machine. The higher the acidity and the smaller the machine the sooner the separator will clog."

Does it Pay to Buy Feed for Stock?

THIS is a very important question, and I have never yet come across a farmer whose answer has not been very positive in the negative. On the other hand, my own decided opinion and conclusion from some years' experience in buying feed for stock, is that under certain circumstances and conditions it does pay.

I am writing this article with the object of having a discussion, through your columns, on the subject in order that we may get at the truth and bottom of the matter.

For the sake of argument, we will take a farmer who grows 1,000 bushels of corn and decides to sell 500 bushels and feed to

his hogs the remaining 500 bushels. I purchase the 500 bushels he has for sale. Who makes the greatest profit or loss on the feeding, myself or the farmer? The man who grows and feeds, or the man who buys and feeds? Say the 1,000 bushels of corn is valued at \$500; the 500 bushels the farmer keeps is worth \$250, the corn he sells me is also worth \$250. In what way does my cost of feeding exceed that of the grower of the corn? My answer is, by the cost of team work and labor in hauling the corn to my farm.

So if my statement is fact, the cost of feeding hogs is very little more to me than the grower, which I consider is counterbalanced by my being able to choose the cheapest and my own time for buying my corn, says Robert Hibbert in Southern Planter.

The growing of corn and the feeding of stock are two different departments in farming, and should not be mixed. If the farmer clears over cost of production \$100 on the growing of 1,000 bushels of corn, this amount should

go to the credit of the corn crop account in his books. He can get from me \$250 for the portion he sells me, and, therefore, the 500 bushels he keeps and feeds is of the same value. What he realizes over \$250 on the grain fed is gain, and under is loss, on feeding.

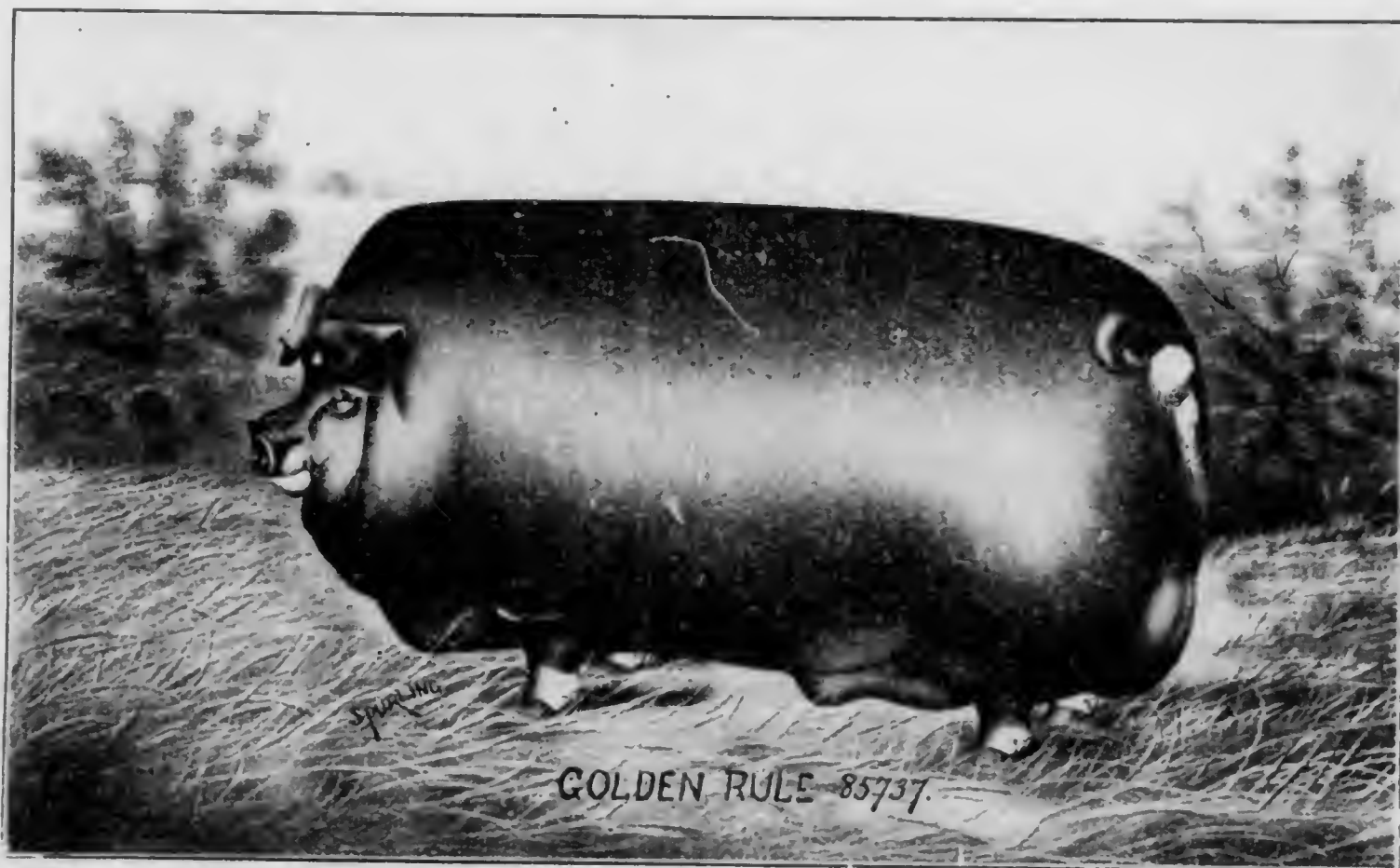
What profit or loss is realized on feeding stock at all times depends on the state of the market. Some times it is satisfactory,

at other times the opposite, precisely the same as any other line of business.

I am trying to show it is possible to buy feed for stock to a great advantage in competition with the man who grows his own, and I go still further and assert that sometimes I have the better of the corn producer by buying below the cost of production.

I have purchased corn in Albemarle county to feed my stock at \$1.30 per barrel (5 bushels). In that case, where does the profit to the grower come in over the buyer in cost of feeding stock?

I want enlightenment on this buying feed question, so if I am on wrong lines, I can stop at once. I am not ashamed of my ignorance, however, as I have only done what I thought would pay me.



Golden Rule, Winner at Chicago, 1903. Owned by W. C. Welch, Harveysburg, Ohio.

WHY SOME BREEDERS FAIL

MANY breeders go into improved live stock and fail simply because they "hide their light under a bushel." They buy the best, they care for it well, they use judgment in breeding and they produce good stock, but they lose sight of the most important part of the business, the matter of disposing of their stuff at profitable prices. A farm loaded with the best live stock in the world would be an expensive luxury to the owner if he were not able to get better prices than the man who produced common stock. For the butcher grade stock is sometimes as good as, if not better, than pure bred stock, and the producer of pedigreed animals should always cater to the breeder instead of the consumer.

There is but one way to create a trade among the class of buyers that are willing to pay high enough prices to justify the careful breeder. It can only be done by advertising. This may be done by exhibiting at fairs or shows, by a liberal use of catalogues and circulars, or by placing an advertisement in a good, reliable live stock and farm paper. The experience of the most successful breeders proves beyond a doubt that the latter is the most successful method. Papers that are always advo-

cating improved live stock have done more to distribute good breeds throughout the country than all other mediums combined. They entice the man who has been contented with scrubs to try something better. They encourage the man who has taken a step in the right direction to take a step higher. They disseminate knowledge along the line of improvement among ordinary farmers until they are convinced that it pays to get out of the old ruts, thus creating a demand.

Lack of enthusiasm and interest in good live stock is often due to breeders themselves. Liberal prices are paid for good animals. Neighbors watch for the outcome. If the prices received are not proportionately higher than common stock at the prices paid they figure that another good man has gone wrong. And their conclusions are about right. The man who pays good prices for good live stock for breeding purposes should get much better prices for what he produces than the man who is satisfied with scrubs. This can be done by creating a market in the way of letting others know what you have by thoroughly and persistently advertising.—The England Farmer.

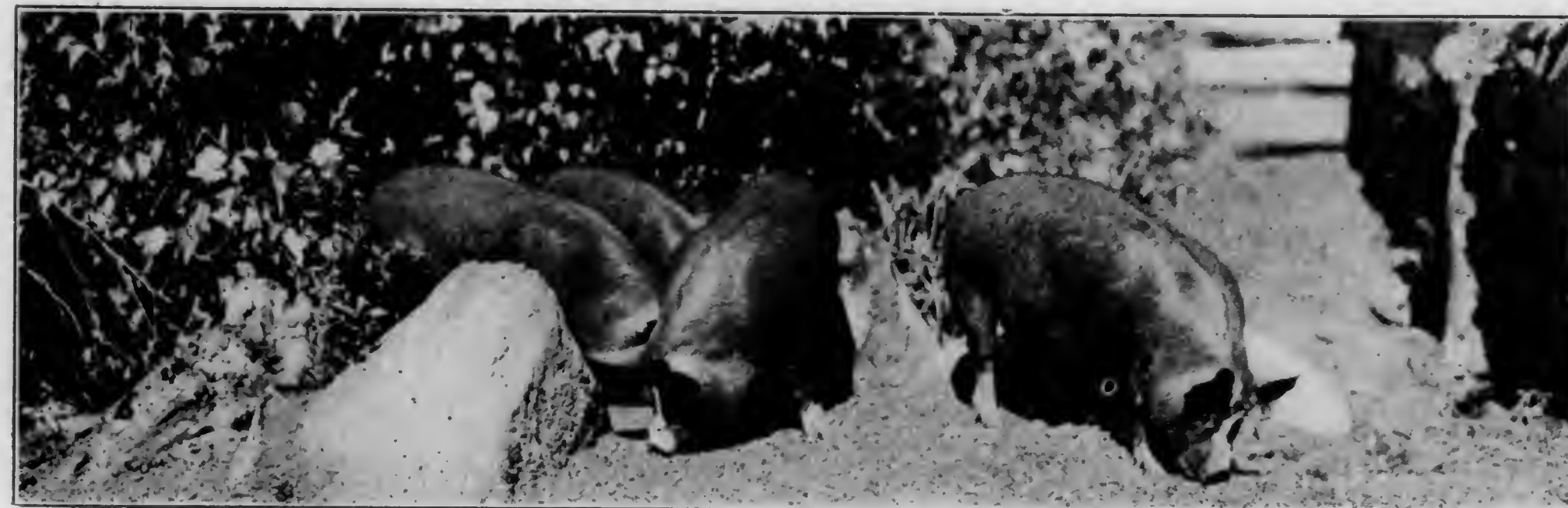
Two Sides to a Tale

EVERY one concedes that the Poland-China hog is a very popular one, and, probably the greater per cent. of all the swine breeders will concede that it is the most popular hog in the world. This popularity is indeed near to the heart of all lovers and producers of this hog, and they are constantly endeavoring at every possible point to further the merits of so valuable an animal to the American farmer.

How this is best to be done, is a question on which great minds differ. Divine wisdom has created "Many men of many minds," and it is certainly within the laws of justice and propriety that men exist, and with them various minds, judgments and appreciations. If, in the beginning, some would have had the creative powers, there would have been but one land, one water, one country, one people and one destiny. It is not our purpose to argue the wisdom of such an arrangement, but it is man's duty to make the best of what past ages have brought to us to-day, and whilst 'tis said that "Man is a creature of circumstances," and still others say that the "True man will rise above every opposition," yet, whether wisely or not, the history of the past does greatly influence the present; the liberty-loving instinct that thrilled the breast of our forefathers has been handed down to us, a blessed heritage to cherish. The American people hail with delight the American freedom of speech and pen; they rejoice in friendly rivalry; they believe that competition is the life of trade. So it is proven in the hog business. The Duroc-Jersey never grew in popularity so fast as when the records back of it were in the hottest competition; severe, even to the extreme of not recognizing each other. The Berkshire never moved with less progress than when there was, practically, but one record, and from it was derived great special

prizes. One time there was but one Poland-China record, and the people that then contended that there was room for more, are the people who today have a special revelation that there should only be room for one.

They claim to be as broad in their views as the shores of time, because they moved their meeting place, when no one out of their own family asked them to, or cared whether they moved or not. The people that were one time back of the only record for Poland-Chinas are broad enough today to assert that there is room on the broad sea of life for every sail; they believe that competition is the healthy avenue of better achievements; they insist that their motives are rightly implanted; that they are sacredly fostered by the people of so great a nation as ours; that in this day when the great interests of all the people are so jeopardized by the combination of wealth; by the formation of trusts; by the centralization of American ingenuity and when the people from every hill and vale cry unto the powers that be, "Away with such monopolies, down with such combines," that now is no time for the men who breed Poland-Chinas to be intriguing with big corporation ideas. The recording fees are now uniform, and are just as low as is consistent with perpetuation of the business. The man that feeds the pig, that carries the "Slop Bucket," that raises the hog, is content with the idea that he is recording his pigs as cheap as it is possible to do it; that when he has stock in the record of his choice he is reaping his own benefits when he records his stock. All the large record companies are doing a creditable business; getting out a good book or more every nine months; giving general satisfaction to their patrons; making enough money to pay all expenses, and the stockholding recorders reaping a satisfactory dividend. We ask the people, Is his not well?



Berkshires Owned at Hood Farm, Lowell, Mass.

Breed or Buy

How a Pactical Farmer Should Obtain His Dairy Cows

D R. J. M. W. Kitchen, of Gilmanton, N. H., in a recently published article, offering a number of reasons why dairymen should buy their cows from professional breeders in preference to breeding them, says:

The great bulk of dairy cattle in this country are mostly used as scavengers of rough farm products, and this condition must of necessity continue in the future. Being a side issue, in most cases the general farmer, with his many irons in the fire, naturally does not give the dairy cow as much thought and care as would be the case if the dairy were conducted as a specialty. It seems to me that the pursuit of dairying as a specialty should not be encouraged. In most cases the specialist dairyman would have too much to contend with in the enforced competition of the cow as the mere scavenger. Her true function in most cases is as a scavenger and a fertility creator. If we leave the latter use out of the question, all the high, narrow feeding of the cow is a mistake; there is not enough gained by it to compensate for the disadvantages of high productive power. Therefore we must remember that the farmer very naturally is not greatly influenced by this question of special purpose in dairy cattle. With the few cattle he does keep, or ought to keep, it hardly seems worth the struggle for productive eminence. Even to attain the brain, evolution necessary to secure that eminence, he has got to sacrifice energy and force that would otherwise be given to other farming efforts. When I kept a half-dozen cows only I picked up the best I could, and would not be bothered with the expense and trouble of keeping a stud bull. I am not blaming the farmer, for I have lived in glass houses myself.

But these considerations do not negate the fact that every dairy cow ought to be specially designed for her work. The average general farmer ought not to keep many cows. Perhaps not more than four or six for each laborer on the farm, but each of these cows should be good cows. To work well there ought to be accessory and adjunct sources of income on the farm outside of the dairy, for excessive time given to milking is weary work, and cow-created fertility ought to get the quickest cash market and not go through the more complex round needed in creating dairy products.

Now comes up the question: Shall the dairy farmer breed his own cows or depend on the breeder for them? He ought to keep fewer cows, but better ones. There is more net profit in fewer good cows than in more poor ones. The average farmer cannot be expected to grow or buy the feeds that shall be the most productively effective for his cows; but whatever feeds he may be able to give his cows, they should be cows of a capacity to make the most economical use of both boughten and home grown feeds.

Inasmuch as correct feeding is a most important element in the creation of the good cow, it is evident that the general farmer can scarcely be expected to compete with the breeder in this respect. It is simply impractical for the farmer dairyman to grow economically the most highly potential feeds for his cows or to secure them by purchase at a living price. He only gets general prices for his cow product. The breeder ought to get something extra for his special feeding and breeder's skill. The farmer in shaping his policies must, of necessity, lay out a plan that in its entirety will make the best return. He cannot give thought and muscle and worry in such ways as to secure the very best cow feeds considered as to quality, any more than he can afford to keep a string of stock bulls and acquire and apply special breeding knowledge in order to develop the few cows he should keep on his farm.

Another reason against the dairy-farmer's being the

breeder of his special purpose cows is that to be a good breeder requires great skill and judgment, as well as considerable investment of capital in amount usually beyond the farmer's grasp. Then, again, the purchase of every bull calf is in reality a lottery—the purchase of a pig in a poke. The value of any bull is never determined until he has been tested, and I suppose most farmers understand this fact as well as all breeders. Furthermore, at public and private sales good cows can usually be bought at a less price than the farmer can raise them for. The breeder ought to be able to produce cows of high merit much more cheaply than the farmer can. It costs big money to buy, keep and handle high quality stock, and when that cost is distributed among the numerous progeny, the individual cost is lessened.

There is a quite generally accepted statement going the rounds that it is not possible to buy good cows, and that the only way is to raise them, which statement is not true. There are lots of good pure-bred cows sold at the public sales every year at prices which place them within reach of the dairy farmers, and there are large possibilities for increasing the sales of this nature. It is true that a few very perfect individuals sell for high prices for breeding purposes; but there is no proof that they are more practically valuable for working cows than those which are sold at living prices. The supply is, of course, limited, but the demand will increase slowly and all the farmers who are likely to so elect can sell their poor cows to the butcher for enough to buy a fewer number of better cows, which will bring in larger net returns.



Yearling Angus Bull owned by Myer & Son, Bridgeville, Delaware.

In making a recommendation of this kind it may be at first thought that I am acting against my own interests as a breeder, as well as against the interests of others. But the breeding business as it exists, is so very unsatisfactory in its results that I think a radical break has got to be undertaken in the traditions to get things going on a better basis. It seems to me that the latter-day policy of specialization and division of labor and effort can be applied in this matter. I think that if the breeder should devote more attention to the idea of purchasing more high-class dairy cows for sale, and less the idea of selling blooded bulls to the farmer, and to look to some accessory income on the farm and to strive to educate the farmer up to knowing what a good cow is and be willing to pay a good price for her, matters would be bettered for all hands—for the breeder, for the farmer and for the advertising periodical. Viewing the matter from the point of view of the farmer, I would rather pay a fair price for individually proven merit than to pay for a bull calf of uncertain promise, albeit of great ancestry, and to have to go to the expense of raising grade cows with all the uncertainties of their having inherited undesirable qualities.

Furthermore, if the policy suggested were generally adopted, then the dairy farmer could keep a beef bull to serve his cows and thus get a better veal product, and also a fairly good animal to feed on for baby or mature beef. But of course, such progeny should not be held for dairy purposes. The policy should be—less milk and less butter, but better milk and better butter at better prices. Veals are always eatable and on many farms some stock can be grown to advantage that does not require the expenditure of labor in milking—stock that takes care of itself during the busy growing season and helps to utilize all-the-year-around employed labor through the winter-feeding requirements.

Read over our programme for 1907—it is interesting.

A Common Herd Well Cared For.

WHEN farmers are told of herds that average 250 pounds of butter-fat per year, one frequently hears the remark that it is practically impossible for the average man to find 20 or 30 cows good enough to make so high an average. They agree that it may be possible to reach such results at experiment stations, but not under actual farm conditions. We wish to say that it is quite possible for any wide-awake farmer to pick up a herd of cows in almost any neighborhood, which, if properly cared for, will average from 250 to 300 pounds of butter per year per cow. In the fall of 1904 the Michigan Experiment Station purchased 20 grade Shorthorn



A bunch of Duroc-Jersey Hogs owned by W. H. Robbins, Springfield, O.

cows in the vicinity of the experiment station for the purpose of ascertaining, first, what may be done in the way of grading up an ordinary farm herd by the use of pure-bred bulls, and, second, to find out what effect proper feeding and management have on the milk-producing power of such cows. For the most part the cows began to freshen in September of the following year, and since that time a record has been kept of each cow's milk and butter-fat produced during the first year. The results of this

record and an outline of the work the station intends to carry on has just been published in bulletin form. The milk of each cow has been weighed daily and a composite sample of each week's milk used for the determination of butter-fat. At the end of each week the number of pounds of milk produced were multiplied by the per cent. of fat, as shown by the composite test which gave the total pounds of fat produced during the week. By increasing the fat by one-sixth of its own weight, its equivalency in butter was secured. From these records it appears that the 20 cows produced on an average during the year, 6,259 pounds of milk containing 4.08 per cent. of fat, or a total of 255.65 pounds of fat, equivalent to 298.25 pounds of butter. In addition to this, 5,007 pounds of skim-milk was the average secured from each cow. This amount was estimated by considering that 80 per cent. of the whole milk was removed as skim-milk. This is an under rather than an over estimate, as many creameries find that each 100 pounds of whole milk produces 85 pounds of skim-milk. The feed consumed by the cows was valued as follows: Clover hay, \$5; corn silage, \$2.50; green corn, \$2; succotash, \$1.50; roots, \$2; cornmeal, \$20; wheat bran, \$18; oats, \$20; dry beet-pulp, \$15; dry molasses beet-pulp, \$16; gluten feed, \$20; oil-cake, \$28; and pasture for the season \$5. The butter produced was valued at 20 cents per pound the year round. This is considered a conservative estimate, since the creameries and milk-condensing factories in Michigan are paying a higher average price than 20 cents a pound of butter represented. The skim-milk produced was val-

ued at 20 cents per hundred weight. The care of the cows was considered to be counterbalanced by the value of the manure and calves. It is stated in the bulletin that account was kept of the labor involved in caring for the herd, and it did not amount to more than the value of the manure and calves.

There was considerable difference in the economy with which the different cow produced butter. It varied from 44.4 to 8.7 cents, whereas the average cost was 11 cents per pound. Nineteen of the 20 cows were kept at a net profit varying from \$60.61 to \$26.10, whereas one cow was kept at a net loss \$9.88. The average profit per cow for the whole herd was \$35.58. The bulletin directs special attention to the high value of two cows, Nos. 13 and 17. The former produced 422 pounds and the latter 433 pounds of butter during the year, whereas the poorest cow, No. 16, produced only 48 pounds of butter. The net profit from the two good cows averaged \$60.45 per head, whereas, as stated before the poor cow was kept at the loss of \$9.88. The average net profit for the two good cows and the poor one was \$36.94, as compared with the average net profit of the whole herd, which was \$36.58.

The striking thing which these figures bring out is that a single poor cow may often counteract the large profit the very best cows make to such an extent that the average of a few of the best and a few of the poorest cows is no higher than that of the remainder of the herd. The records reported show two things: First, the absolute necessity of farmers testing their cows so as to enable them to intelligently weed out the poor ones; and, second, that careful feeding and management will do a great deal towards bringing up the average production of an ordinary herd composed of grade cows.

While it is desirable, and under some conditions highly desirable, to use pure-bred cows in the dairy, it is often impractical for the farmers to start in dairying in that manner. The average man will have to start out with as good common cows as he can find. Give them the proper feed and good care and then grade up the herd by means of pure-bred bulls of the dairy type. The Michigan experiment will in a few years prove to be a very interesting one, in that the herd of 20 cows has been divided into four lots of five each and each lot will be bred to registered bulls. One lot will be bred to a Jersey, one to a Holstein, one to a Guernsey, and the other to a Shorthorn bull. The calves from each line of breeding will be bred in the same manner as their dams. The cost of feed for each cow in the herd was \$33.07; the minimum \$21.47, and the maximum \$39.23. The return for \$1 worth of feed averaged \$2.11; the minimum was 54 cents, and the maximum \$2.65.—Farmers' Tribune.



Jerseys at Hood Farm, Lowell, Mass.

IMPROVING THE STOCK.

In an address given by Prof. W. J. Frazer, of the University of Illinois, he gave expression to the following sound ideas in regard to cattle breeding:

Improving pure bred stock by breeding is an exceedingly intricate and difficult problem, as you will know, but grading is comparatively simple, as with common cows a pure bred sire is sure to be prepotent, and good results are therefore certain to follow. The old saying, "The sire is half the herd," does not always express the whole truth. In a sire whose ancestors have been bred for dairy purposes only, these characteristics have become firmly fixed, and when crossed on cows of no special breeding will produce calves more like the sire than the dam. In this case the sire counts for more than half. A dairyman may start with nothing but the most ordinary cows, and by simply breeding to dairy sires of excellent quality and pure breeding he will within a few years have a fine working herd. Do not misunderstand me. I am not advocating grading, but not crossing breeds. Great harm has been done and is still being done to the dairy cattle of the country by crossing.

Our American farmers, as a class, are too fickle: It seems to be difficult for them to decide on a policy and settle down to a permanent thing. Frequently a dairyman will make a start by purchasing a Holstein-Friesian sire, and about the time he gets some half-blood calves a brilliant idea strikes him, and he thinks he will show the dairy world something about producing dairy cattle that will give a large flow of milk and also test high in butter fat, and he purchases a Jersey sire. After another two or three years, beef brings a good price, and he decides he will try a little beef blood, so that he can get more for his old, worn-out cows: The result is his herd, after all these years of breeding, is no better, if indeed as good, as when he started.

I do believe there is untold benefit to be derived from grading, and that this is the way to improve the average dairy stock and also make a market for pure-bred bulls. No matter how poor a herd a dairyman may have, the first crop of calves from a pure-bred sire will be half-bloods or better, and the next generation three-fourths or better. I can not imagine how a dairyman can improve his herd more surely or more economically than by this method.

Too much stress can not be laid upon this point, and money and time spent in finding an excellent sire will prove a remunerative investment even to the average dairyman if he will stick to one breed. One of the chief missions of the breeders of pure-bred dairy cattle should be to supply our dairy farmers with sires for grading, and thus greatly improve their herds at but comparatively slight expense.

What is the expense of furnishing every calf that is born with one good parent? Suppose a man has a herd of forty common cows and pays \$100 more for a pure-bred bull than he

BLOODED STOCK for December.

ONE LEVER DOES IT ALL ON THE I.H.C.



You would rather operate one lever than to get mixed up with three or four. The I. H. C. Spreader has but one lever—the only spreader of that kind.

This is just one point of superiority over other spreaders. There are others. No other spreader has a vibrating rake to level the load and bring the manure up square to the cylinder. Everybody knows a spreader works better and gives a more even distribution when the load is level.

Great power is required when a spreader is in operation to run its cylinder, move its apron, level the load, etc. The I. H. C. Spreader gets ample power from both the rear wheels of the wagon.

It not only gets more power but it is surer of its power at any moment. It makes no skips, and it avoids fiction, side strains, and consequent breakage.

This same thing helps to secure the light draft for which I. H. C. Spreaders are noted.

Its steel wheels have a superb strength. Broad tires, they do not rut the land or cut in to make heavy pulling. The turned-in flange keeps out the dirt and mud.

Rear wheels are provided with traction lugs. There's no slipping or sliding on wet or frozen ground.

It has a wide range of feed. You spread as thick or as thin as you like.

You see everything has been thought of and worked out to make the I. H. C. the leader of all spreaders.

You have choice of two types—Clover-leaf, endless apron spreader and the Corn King, with return apron. Each type is made in three sizes.

If you buy an I. H. C. manure spreader you know it is right.

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Send three two cent stamps for a copy of "Farm Science," Book just from the press, written by eight leading agricultural authorities of the United States. Treats practically every farm topic in the most forceful, money-making way.

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We manufacture and sell the celebrated American Manure Spreader to the consumer direct from our factory—saving all the middle profits made by jobbers and dealers. These profits are left out of consideration in the prices that I want to make you direct from our factory on an American Manure Spreader.

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liberal time payments—giving our customers easy terms to pay for their Spreaders—letting the Spreader really pay for itself as it earns for you.

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The American Manure Spreader has 40 per cent more exclusive features than any other Spreader. It is high class in every respect—made to last a lifetime.

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To prove all of our claims for the celebrated American Manure Spreader, we allow 30 days' trial on every Spreader we sell.

This permits the customer to use the Spreader on his own farm for a full month to be satisfied that it is just as represented. If not as represented it can be returned to us. We pay all freight both ways—trial being FREE.

The low price I want to quote you on an American Manure Spreader will be for the Spreader delivered at your station.

We Pay All Freight

This price will be for the Spreader on time—this price will be for the Spreader on trial—and this price will be a price that is lower than dealers are charging for Spreaders that are not nearly so good as the American. When you examine all the exclusive features of the American you will agree with me.

Write for my price—and write for my catalogue and booklet. They will tell you all about the American Manure Spreader and give you a lot of good information on the question of fertilizing—a question that every farmer is interested in and wants to know all about.

Just write me today on a postal card. I will see that you get our book and my special price at once.

W. W. COLLIER, Gen. Manager
AMERICAN HARROW CO.
11741 Hastings St. DETROIT, MICH.

would for a scrub. It will cost no more to keep the one than the other, and he can retain him for at least two and a half years, which will make it just one dollar per head extra to have each calf in the herd at least a half-blood or better. If we consider the male calves of no more value, it would raise the price of having the

heifers half-bloods to two dollars apiece. Surely this is a nominal sum; and I do not know where money could be better invested if it cost many times this amount. Yet \$125 is a fair price to breeders for a yearling bull suitable for use in grading up a dairy herd.

BLOODED STOCK for December.



Dan Patch 1:55, The Pacing King, Cresceus 2:02 1/4, The Trotting King, THIS BEAUTIFUL PICTURE IN 6 BRILLIANT COLORS MAILED TO YOU FREE.

We have just published a large, colored lithograph of the above Photo-Engraving, which shows our World Famous Stallions, Dan Patch 1:55 and Cresceus 2:02 1/4 in an Exciting Contest and at Extreme Speed. The picture is 16 by 21 inches and shows both horses in their natural colors and as life-like as if you saw them racing on the track. It is a picture that would sell for \$2.00 if gotten out in a small edition. You can have one of these Large and Beautiful Colored Pictures of the Two Most Valuable Harness Horse Stallions and Champions of the World, Absolutely Free and we will prepay the postage. This picture was made from life and every lover of a great horse should have one.

WRITE FOR ABOVE PICTURE AT ONCE.

1st. Name the paper in which you saw this offer. 2nd. State how much live stock you own and then we will mail the picture promptly. Picture will not be mailed unless you give us this information and address.

INTERNATIONAL STOCK FOOD CO., MINNEAPOLIS, MINN., U.S.A.

AFTER EATING "INTERNATIONAL STOCK FOOD" EVERY DAY FOR FOUR YEARS DAN PATCH OPENS THIS SEASON AS FOLLOWS:

First Start, Galesburg, 1:57%. Third Start, Minnesota State Fair, 1:56%.
Second Start, Dubuque, 1:58. Fourth Start, Minnesota State Fair, 1:55.

GOOD JERSEYS.

Lots of farmers, and dairy farmers too, think that there is no profit to be made from keeping Jersey cows. They have all sorts of notions against them, such as lack of size, not hardy enough, cannot sell them for beef, and all that. But there is a herd that for actual profit it will be hard to beat anywhere or in any breed.

Mr. A. F. Peirce, of Winchester, New Hampshire, reports the follow-

ing records: The best 15 of his cows averaged 6,883 lbs. of milk, making 454 lbs., 15 oz. of butter per cow; the best 9 cows averaged 7302 lbs. of milk and 478 lbs., 7 1/2 oz. of butter per cow; the best 6 cows averaged 7226 lb. of milk and 494 lbs. of butter; the best 4 cows, 7221 lbs. of milk and 512 lbs. of butter; the best three cows 7129 lbs. of milk and 520 lbs. of butter. All this in twelve consecutive months. Some of the men who want big, beefy cows to do dairy work with

can figure by this the difference in hard cash earned between their cows and Mr. Peirce's much despised Jerseys.

Until one has employed the scale in weighing the milk from his cows he cannot realize how far from correct has been his estimate of their annual production.

When writing advertisers always mention Blooded Stock.



Dalmeny Lady Frost, No. 7980, A. Y. R. Bred by Earl of Rosebury, of Scotland. This sow weighs about 900 lbs. Was a noted prize winner in England and Canada. 2 1-2 years old. Note her extreme length and smoothness.

Aldoro Clara, No. 7980, A. Y. R. Bred by J. E. Rothous, of Ontario, Canada. This sow is 2 1-2 years old and would easily carry 900 lbs. We consider her well high perfect. A superior brood sow. She now has a fine litter of pigs.

Both of these great sows are owned by Aldoro Farm, Rosston, Pa. See their adv. in this issue.

3 FEEDS FOR ONE GENT

My stallions, Dan Patch 1:55, Cresceus 2:02 1/4, Directum 2:05 1/4, Arion 2:07 1/4, Roy Wilkes 2:08 1/2, Buttonwood 2:11 and my one hundred high-class brood mares—"International Stock Food" every day. Dan Patch has eaten "International Stock Food" every day for over four years and during this time has broken fourteen World Records and his physical condition has been marvelous. It will pay you to use it for your Stallions, Brood Mares, Colts, Race Horses, Show Horses, Carriage or Coach Horses and Work Horses because it gives more Nerve Force, Endurance and Strength. "International Stock Food" is prepared from finely powdered medicinal roots, herbs, seeds and barks and is fed in tablespoonful amounts as an addition to the regular grain feed. It is equally good and very profitable to use for Horses, Colts, Fattening Cattle, Cows, Calves, Hogs, Pigs, Sheep or Lambs, because it Purifies the Blood, Tones Up and Permanently Strengthens the Entire System. Keeps them Healthy and Greatly Aids Digestion and Assimilation so that each animal obtains more nutrition from all grain eaten. In this way it saves grain and will make you a large extra profit. We have thousands of reliable testimonials on file in our office, and every pound of "International Stock Food" is sold, by over 12,000 dealers on a "Spot Cash Guarantee" to refund your money if it ever fails. Constantly used by over two million stockmen throughout the world. If you desire any further information I will be pleased to have you write me.

M. W. SAYAGE, Prop. of
International Stock Food Co.
International Stock Food Farm.

Holsteins as Producers.

Four years ago March 1 we purchased our first pure-bred Holstein-Friesian cow, and at that time were dairying with a herd of high grade Shorthorn cows of the milking strain, a couple of Jerseys and a graded Holstein weighing about 900 pounds and giving 63 pounds of milk in one day. Some of our graded Shorthorns were excellent and when turned to the block weighed in the neighborhood of 1500 pounds. We have been gradually replacing our Shorthorns with pure-bred Holsteins and shall probably turn off the last of our Shorthorns this fall. We usually keep a herd of about 20 cows, of milking age and at present have a herd of 19 pure-bred females and a good male, with excellent official backing, to head our herd.

About a year after making our first purchase, we made our first official record, and at present nearly every member of milking age has an official record for milk and butter.

Our aim has also been to keep such cows as will produce not less than 400 pounds of butterfat per year and as much more as we can possibly get them, says Reddelin Bros., in The Holstein-Friesian Register. The Holsteins that we have selected we find capable of producing the 400 pounds, and most of them exceed this amount. We also find these same cows not only capable of making a large amount of milk and butterfat in a year, but also in seven and 30 days.

Our milk is separated on the farm, the separator being run by the herd bull in a tread power, which is his daily exercise. In winter time part of the cream is delivered at the local creamery and the rest is shipped to Milwaukee where it is used for making ice cream and confectionery. Our cream buyer does not find it necessary to advertise this Holstein cream as Jersey cream, but advertises with an enlarged portrait of our Holstein-Friesian cow, Winnie Wartena Netherlands, 37630, with an A. R. O. record of 21.41 pounds of butterfat in 7 days and 88.71 pounds in 30 days, the highest records ever made in the state of Wisconsin, and photos of several other of our A. R. O. cows. Our herd has produced not less than \$70 per head, each year, for butterfat alone, and some years run as high as \$83.50.

The skim-milk is used in raising the pure-bred calves. We generally sell the males at the age of three months but have not as yet desired to dispose of any females. We think it would hardly be fair to figure in the price of our calves when figuring up what a cow produces in a year, as they sell readily at breeders' prices.

Skim-milk not used for calves is used for hog feed, for which we find 100 pounds to be worth about one-half bushel of corn.

We have raised a drove of 13 hogs on corn and skim-milk, with a little additional ground feed, that averaged 2933 pounds at six and one-half months of age.

We prefer the Holstein cow because we find a wider market for her and her products, besides finding a greater number of good milk pro-

ducers among the heifers we raise, than from among other breeds we have tried; and while we find that per cent. of profit is not as great as with the smaller breeds, we also find that it does not cost nearly as much to make the extra large amount of milk that they produce, as its value for calf and hog feed. We usually provide one ton of grain feed for each cow per year and this allows sufficient to feed, when pasture is short in summer.

We do not believe in starving money out of our cows, but use them as customers, and the more they consume the better we like it, as we have not found any whose credit is not good.

Good judges believe that one-fourth of the cows in the entire country kept for milk do not pay the cost of keeping, and nearly one-fourth more fail to yield an annual profit.

Cows in milk will consume and digest more food and give more milk with moderate open-air exercise than if kept in closed quarters.

The draft horse has added more wealth and other class of horses, and we might say more prosperity to American farmers than any other breed of stock.

A high-grade colt of any breed by good keeping may develop into a good-sized valuable horse, but for breeding purposes will always lack an essential feature, a pedigree.

Nothing on the farm pays in cash returns better than so treating the young colts that they will develop into the most valuable animals that their peculiar formation will allow of.

The feed and care necessary to raise a poor horse cost just as much as it does for the very finest ones. The only difference in their cost is in the blood of the sire and dam.

See page 3 for subjects for 1907.

BLOODED STOCK for December.

MILK CANS ROB YOU

Look through a microscope at milk set to cream in pans or cans and you'll see how they rob you. You'll see the caseine—the cheese part—forming a spider web all through the milk. You'll see this web growing thicker and thicker until it forms solid curd. How can you expect all the cream to rise through that? It can't. This



caseine web catches a third to half the cream. You stand that loss just as long as you use pans or cans for they haven't enough skimming force to take out all the cream. But, just the minute you commence using Sharples Dairy Tubular Cream Separator, you stop that loss.

Sharples Dairy Tubular Cream Separators have 10,000 times more skimming force than pans or cans, and twice as much as any other separator. They get all the cream—get it quick—get it free from dirt and in the best condition for making Gilt Edge Butter. Caseine don't bother the Tubular. The Tubular is positively certain to greatly increase your dairy profits, so write at once for catalog 1-300 and our valuable free book, "Business Dairying."

The Sharples Separator Co.
West Chester, Pa.
Toronto, Can. Chicago, Ill.

TIME IS THE TEST

of durability in a high-speed machine like the cream separator. No other machine a farmer uses has harder use. Run twice every day, winter and summer, it must not only do thorough work, but to be permanently profitable, it must be durable.

U.S. CREAM SEPARATORS

are built for long service. A solid, low frame encloses entirely all the operating parts, protecting them from dirt and danger of injury. The parts are few, simple and easy to get at. Ball bearings at high speed points, combined with automatic oiling reduce wear as well as insure the easiest operation. Such careful and thorough construction is what enables the U. S. to better

STAND THE TEST

than any other separator. You don't have to buy a new one every year or two. And remember: the U. S. does the **cleanest skimming** all the time. Look into this. Write today for a copy of our handsome, new separator catalogue. Ask for number 199. It is finely illustrated and tells all about the U. S. Address:

Vermont Farm Machine Co., Bellows Falls, Vt.

Prompt deliveries of U. S. Separators from warehouses at Auburn, Me., Buffalo, N. Y., Toledo, O., Chicago, Ill., La Crosse, Wis., Minneapolis, Minn., Sioux City, Ia., Kansas City, Mo., Omaha, Neb., San Francisco, Cal., Portland Ore., Sherbrooke and Montreal, Que., Hamilton, Ont., Winnipeg, Man. and Calgary, Alta.

Address all letters to Bellows Falls, Vt.



BLOODED STOCK for December.

HOW A SOUTHERN MAN GROWS HOGS PROFITABLY.

Hon. Charles Schuler, State Commissioner of Agriculture and Immigration, has, for many years been a successful raiser and feeder of hogs on his home property in DeSota Parish, La., and as his method of feeding, no doubt, be of interest to many, we give it in his own words:

"1st. I used pastures containing Bermuda and natural grasses, also a liberal supply of good water which can be easily supplied by springs, wells or tanks. If your land permits the successful growing of alfalfa, you can furnish sows, shotes and pigs an ideal grazing spot to be used in connection with your pastures. In the absence of alfalfa, sow sorghum broad cast. I break and pulverize my land thoroughly about March 1st, then I sow the seed, using from 1/2 to 3/4 bushel of seed per acre. Harrow in, and if your land is not too wet, run a light roller or drag over it. When the plant becomes about 10 inches high I allow my hogs to gain access, permitting them to run in and out as they please. I have run 56 head of sows, shotes and pigs, in connection with the pasture, on a two-acre patch. It will furnish good grazing until about July 15th. I feed in connection with sorghum, once a day at a regular time, two nubbins of corn to every head I have."

"I utilize such corn mainly, which is unfit to feed to my work stock, and which unless fed to the hogs, would become a comparative waste."

"2d. I have what is called three rotation fields of ten acres each, used mainly for experimental purposes, having in view the upbuilding of soil."

"In one of these I sow oats in October, which will furnish good winter pasture for calves, colts and pigs. After harvesting the oats, which usually takes place the latter part of May, I permit my hogs to also gather what waste grain there may remain in the field. About the middle of June this field is again planted in peas, Spanish goobers (peanuts), corn, sorghum and sweet potatoes. This crop is planted for hog feed late in the fall, the hogs doing their own gathering, and being allowed to feed on whatever variety they may prefer and as much of it as they choose."

"3rd. Another of the rotation fields has been planted in corn in which at 'laying by time' were sown, broad cast, from 1 1/2 to 2 bushels of whippoorwill peas. The entire products of this field, except the peavine, is used in the fattening of hogs."

About July 15th, when the peas begin to mature, I turn into this corn-field all the shotes; these I expect to kill during the winter. I let them eat wheat, and as much as they please, having care, however, that at all times they have access to a mixture of salt, charcoal and hardwood ashes placed in covered troughs convenient for them to reach. When this field is exhausted, the corn fields planted with corn to feed work stock, every acre of which ought to be planted at 'laying by' time in peas, will have been harvested, and the hogs turned in to do the gleanings,

WORLD'S BEST BUTTER FROM DE LAVAL CREAM

Cream skimmed by a DE LAVAL separator can be made into butter SUPERIOR to that which can be made from cream skimmed by any other separator or system. This is the FACT—the proof of which grows more and more conclusive each year. Following is a list of the more important STATE FAIR FIRST HONORS awarded DE LAVAL users during 1906:

OHIO—Conover Creamery Co., Greenville.....	Score 98
INDIANA—Ray & Arnold, Logansport.....	" 97
ILLINOIS—W. J. Kane, Morrison.....	" 97
WISCONSIN—W. J. Clark, Troy Center.....	" 97
MINNESOTA—M. Sondergaard, Hutchinson.....	" 98
IOWA—R. Rergsather, Northwood.....	" 98 1/2
St. Louis City—C. J. Rohde, Manchester, Iowa.....	" 99

Of special note are the awards made at the Ohio State Fair where the highest score of 98 went to butter entered by the Conover Creamery Co. of Greenville, MADE FROM DE LAVAL HAND SEPARATOR CREAM, while the butter receiving the second highest score of 97 was also made from DE LAVAL HAND SEPARATOR CREAM by the Glen Echo Creamery Springfield. Here, as in many other instances, we have a practical demonstration of how much the DE LAVAL separator means in both creamery and farm separation.

All highest awards in every contest of the National Buttermakers Association, from 1892 to 1906, including the great Dairy Show in Chicago this year, have been won by use of DE LAVAL machines. The butter receiving highest score at the World's Exposition in Paris in 1901 was DE LAVAL made, as was also the Grand Prize butter of the St. Louis World's Fair in 1904. A DE LAVAL catalogue will help to make plain why DE LAVAL cream is superior. Write for it today.

THE DE LAVAL SEPARATOR CO.

RANDOLPH & CANAL STS., CHICAGO.	General Offices:	121 YOUNG SQUARE, MONTREAL.
1219 FILBERT STREET, PHILADELPHIA.	74 CORTLAND STREET, NEW YORK.	75 & 77 YORK STREET, TORONTO.
9 & 11 DUNDAS ST., SAN FRANCISCO.		248 McDONNELL AVENUE, WINNIPEG.

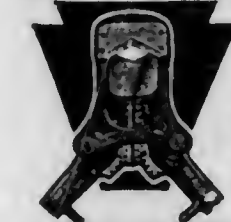
after which the crop planted in the oat field will be ready to be occupied. By the adoption of this method you will not only raise and fatten hogs at a normal cost, but materially improve your soil.

"My farm is situated in the hills of DeSota Parish. My main dependence for the physical upbuilding of the soil, is the drippings from stock, and pea culture."

See that your friends subscribe for Blooded Stock.

EASY TO DEHORN

Your cattle with the KEYSTONE Dehorning knife. Operation performed in an instant with little pain. Leaves stumps so that it heals quickly. The KEYSTONE Dehorner is sold on a money back guarantee. Send for free booklet giving valuable dehorning facts. M. T. Phillips, Box 21, Pomeroy, Pa.



VICTOR TRIPLE GEARED MILL

For grinding ear corn, small grain, etc., for stock feed on the farm. Runs easily. Grinds 15 to 25 bu. per hour. Two sets of burrs, fine and coarse with every mill. Shipped on 10 DAYS FREE TRIAL. OTHER STYLES OF SWEEP AND POWER MILLS IN OUR CATALOG 25. THE VICTOR FEED MILL CO., Springfield, Ohio.



TEST IT BEFORE YOU BUY

Sample Sent Free. Brown Fences are made of the highest grade wire No. 9 gauge, thickly galvanized. Test our sample for strength. Note the galvanizing and see how thick the coating. Any trial will prove it strong, solid, substantial and durable. Requires less posts than most fences and is guaranteed to outlast any two of light weight fences. Ask for free sample and catalog of 12 styles. Freight Paid on 40 Rods or more. THE BROWN FENCE & WIRE CO., Cleveland, O.

With the Business Man.

Business Points You Should Keep Posted Upon. Means Money for You.

A Hog Will Have Cholera

To immune hogs against cholera, put them in a lot with sick and dead cholera hogs, where you know they cannot fail to get the disease at once. Keep them in this lot for six days, always on very short rations, not more than one-fourth the ordinary amount of food. By the end of the sixth day the disease will have set up in the hogs, but they are not yet sick. On the evening of the sixth day after you put the hogs in the infected lot, begin treating the hogs with the Snoddy Remedy by giving the regular treatment, the same as directed for diseased hogs in Article No. 5. This treatment will break up the disease before it makes the hogs sick and they will go through it without missing a feed. Such hogs will thereafter be immune for life, and can be kept in a lot with sick and dying cholera hogs in perfect safety.

Do not act in a hurry or become excited. Act deliberately and with judgment. The disease comes on a hog very slowly when on short feed, as these should be. This immunizing treatment is thoroughly practical and perfectly safe. Hundreds of extensive feeders who have infected lots are using this system with perfect success. It must be understood that the matter of time and quantity are two important factors in any of the treatments with the Snoddy Remedy. The remedy is not made of rubber, and you cannot stretch it to make a box treat more hogs than we say, according to their weight. We tell you to give the regular treatment to the hearty hogs of the diseased herd in six days' time or as near this time as possible. The puny or sick ones may require eight to twelve days in which to take the full prescribed amount of the remedy. However, if you are careless in the treatment and allow it to require two or three weeks in which to give the full amount of the Remedy, you will at no time have enough of it in them to put their systems thoroughly under its influence, and the result will be failure. Do not stop the treatment until you know the disease is broken. No danger in a diseased hog taking too much of the Remedy in six or eight days. There is more danger in too much feed than there is in too much remedy.

The American Manure Spreader advertisement puts up to our readers a proposition that, considering the recognized merit of the spreader, will no doubt have acceptance by many who are about ready to purchase. A few years ago a manure spreader was looked upon as rather a luxury to be indulged in only by "fancy" farmers. Today, however, this implement is more thoroughly and wisely understood. It is decidedly a money maker and a money saver, distributing the manure much quicker and much better than it

can be done by hand. The spreader is rapidly becoming one of the necessities on a well equipped farm. Read the ad of the American Harrow Co. and note their proposition. When you buy goods of merit from reliable firms you are not taking any risk, especially when they will ship to you and pay the freight, give you 30 days free trial, and if not as represented ship back at their expense.

Messrs. N. P. Kershner & Co., Ansonia, O., desire to call the attention of breeders and farmers to the quality of their Chester White Herd, particularly to their yearling boar, Ringmaster. His height is 30 inches, width 21 inches, length from pole to tail 60 inches, around heart and flank 69 inches, around ham bone 9 inches, average underline 3 1-2 inches above ground, weight 615 pounds. He is very smooth and mellow, fine, straight coat, good head and ears, good on feet and legs. You need one of his get or a sow bred to him, to be in the swim next year. We have just added a "I'm It" boar to our herd from Parquhar's late sale that we think will mate well with Ringmaster's gilts and some others we have. We can show spring pigs sired by eight good boars. Describe your wants in your orders. Both sexes for sale in spring and fall pigs. Prices reasonable.

Treat Your Own Horse Ailments.

Many animal owners make a serious mistake in not being prepared to do for themselves many things upon which they habitually seek aid from others. If a horse goes lame or a shoe boil develops, their first thought is of the veterinarian. This means valuable time lost and is a waste of money. The commonest ailments of horses are not difficult to understand. With the aid of that matchless little book, "A Treatise on the Horse and His Diseases," published by the Dr. B. J. Kendall Company, Enosburg Falls, Vt., there are but few ailments that every horse owner cannot understand. Then with the wonderful Kendall's Spavin Cure, which has been the foremost remedy for nearly two generations, he will be able to cure, absolutely, the great majority of injuries and ailments. It is the rarest thing that a spavin or a ringbone, curb or splint, if treated in time, does not yield to this great remedy. If horse owners will keep it constantly on hand, they will be able to treat for themselves and to treat promptly upon the first appearance of the growth. They will be far more certain to effect an absolute cure than the veterinarian can certainly cure them. But when taken in time we doubt whether

Cutaway Tools For Large Hay Crops

Three of Clark's Intense Cultivators produced this year 14 1-2 acres, 102 tons of well dried Alfalfa, Timothy & Redtop hay. If you want to know how

CLARK'S
No More Use For FLOW
DOUBLE ACTION JOINTED POLE CUTAWAY HARROW
Send for Circulars to the CUTAWAY HARROW CO., Higganum, Conn., U.S.A.

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\$60 A Boy or Girl can run it. Send for catalogue GOES LIKE SIXTY SELLS LIKE SIXTY
For Pumping, Cream Separator, Churn, &c. OILSON MFG. CO. Port Washington, Wisconsin
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For All Kinds of Roofs

High or low roofs, factory or farm, flat or steep, in any climate the Lincoln Flint Coated Roofing is BETTER than iron, tin, slate, paper, tar or gravel.

Lincoln Roofing
requires no paint until after years of use; is flint coated, has no tar and is absolutely waterproof and fireproof. Send today for FREE sample catalog, and special prices.
Lincoln Waterproof Cloth Co. 707 Church St., Bound Brook, N. J.

SCIENTIFIC MILLS
Grind all grains, ear corn, shelled corn, oats, rye, wheat and barley. Largest capacity with smallest power.
STRONGEST and most DURABLE
50 styles and sizes. Sweep, Geared, Combined and Power.
Also Scientific Gas and Gasoline Engines. Write for new catalogue
THE FOOS MFG. CO., (Established 1878) Springfield, Ohio

a single case can be produced where this old standard remedy will not effect its cure.

What is true of spavins, ringbones, curbs and splints, is doubly true of such casual ailments as cuts, wounds, ordinary lameness, etc. Kendall's Spavin Cure is a dependable remedy, and horse owners would do well to keep it always on the shelf.

The Delaware herd of Aberdeen-Angus cattle, owned by Meyer & Son, Bridgeville, Delaware, was established in 1902, with twenty-four head to start with, selected mostly from the famous Woodlawn herd, the home of the world's champion steer Advance, which sold for \$1.50 per pound live weight.

Desiring to obtain the blood of the Highland Champion Bull, Prince Ito, which sold at public auction for \$9100, we purchased one of his calves, Prince Barbara, at a long price, to head our herd, and he is doing fine work. He is a half brother to Prince Ito 2nd, the champion bull of the World's Fair. We believe in Prince Barbara we have as fine as exists in the breed. He comes from champion stock of both continents and is a descendant of the blood runs through his veins. This spring we found we must have another bull to assist Prince Barbara as we had some Prince Ito heifers to breed, we selected another fine bull, Pride General 2nd, a Pride of Aberdeen, sired by the great Blackbird bull Heather Blackbird 20333, who has sired many champions. His dam is Pride 4th, of Keilor Park 30226. This bull is about as fine as they grow; low down and blocky, and if he does not produce some fine stock from the Prince Ito heifers and any other cows mated with, we shall be sadly disappointed.

Among the cows in our herd is Viola of Osage 25278, sired by Turk 2491; Apricot of Emerson 5th 29553, sired by Blackbird Hero 1449; Lucky 26023, sired by E. L. Roy, dam Lucky Duchess. Then we have two of Zario blood, sired by Zario 15th; two Duchesses, Princess, Baroness, Boghead, Maggie, Blackbird, Drumin Lucky. We have taken great pains to select good blood, both in sires and dams, and spared no money to get our foundation stock, having in mind the best is none too good, and we believe we have one of the best bred herds in the Eastern States, and invite inspection and comparison.

How about the gasoline engine; have you bought one? It is unnecessary to buy without feeling pretty well satisfied in your own mind which you prefer. They are not all alike by

BEST ON EARTH

Used Over 20 Years
Tatumville, Ky.
April 10, 06.
Dr. B. J. Kendall Co.
Dear Sirs:—I have been using your Spavin Cure and other remedies for over 20 years and think they are the best on the market.
Respectfully yours
S. J. Cox.

Kendall's Spavin Cure
is the remedy for Spavins, Splints, Ringbones and Curbs that endures. Two generations at \$100 is worth. Price \$1.10 for \$5. Greatest known liniment for family use. All druggists sell it. Accept no substitute. The great book "A Treatise on the Horse," \$1.00.
DR. B. J. KENDALL CO., Enosburg Falls, Vt.

ARMY AUCTION BARGAINS
Furs, \$1.50 up. Old Pistols, \$1.00 up. Pistol Holders, \$1.25 up. Foot Am. Issues, \$1.25 up. Fine Flannel Shirts, \$1.50 up. Cavalry Lard, \$1.50 up. N.C. Officers' Swords, \$1.50 up. Surgical Instruments, \$1.50 up. New Cavalry Socks, \$1.50 up. Cavalry Spurs, \$1.50 up. Army Fur Caps, \$2.00 up. Khaki Shirts, \$1.50 up. 7 Shot Cartridges, \$2.00 up. Army Hats, \$1.50 up. 1st Aid Pkg., \$1.50 up. Hunting Knife, \$1.50 up. Mill. Black, \$1.50 up. Army Saddles, \$2.00 up. Overcoat and Cape \$3.00 up. Navy Reefers, \$3.00 up. Uniforms, new, \$1.50 up.
Large catalogue full of valuable information with net wholesale and retail prices, mailed 15 cents (stamp).
FRANCIS BANNERMAN, 601 Broadway, New York
Largest dealer in the world in Government Auction Goods. 15 Acres for storage, 25 Acres Broadway Bldg. Room.

far; one might as well buy a horse with eyes shut as an engine. Look them over as you would a horse and let your money buy you what you want. If you will give a few moments to looking over the catalogs you will find them to tell you a whole lot about gasoline engines that you need to know. The readers of Blooded Stock are more interested in gasoline engines than agricultural people generally. They have more use for power on the farm. Don't buy the first engine that some agent comes along to sell, spend a few cents for postals cards to look over some others. We know those advertised in this issue are among the best and made by firms who stand back of whatever goes out of their factory.

Virginia Durocs.

For the past decade the farmers and stockmen, encouraged by the fairs of Virginia, have been seeking improved stock in all lines. Because of almost prohibitive express rates the bringing of registered animals into the state has been slow, especially of swine eligible to record. Frequently the farmers have been induced to take substitutes for registered stuff recommended as "just as good," in order to buy it cheaper. Recorded animals, or those eligible, are preposterously expensive of the long lineage of fixed type, which a grade cannot have, though having often the type, color and appearance of a pure bred. The scrub blood is so near the top crosses that in the get of a grade it will continually crop out. The result of such breeding could be seen at the Virginia fair the past year and is frequently seen in the herds.

A recent shipment into Virginia is worthy of special mention and consideration. At the annual sale of S. R. Quick & Sons, Gosport, Indiana, Mr. Leslie D. Kline, of Vaucluse, Virginia, attended the sale for the purpose of securing Durocs for himself and others. Mr. Kline purchased at the sale 13 head, and Messrs. Jno. W. Rice & Son, Winchester, Va., 14 head. Others fell into line to join Messrs. Rice and Kline and take advantage of the reduced rate had by taking a car load. Those who had the pleasure of seeing this car as prepared and loaded by Messrs. Quick & Sons, say it certainly was in fine condition and indeed very attractive. It contained the sale purchases mentioned, and for Rice & Son two fine sows shipped to Quick & Sons to be bred to Beat Him If You Can, the \$3,000 boar and Quick's Perfection, and four fine gilts purchased privately by the Quicks; for Leslie D. Kline those acquired at public sale and 10 bought of Messrs. Quick afterward, and a Shorthorn bull calf; for R. P. Thorpe, Nineveh, Va., two bred gilts ordered by telegram, and for M. N. Schuchely, of Clear Springs, Md., a fine young Shorthorn bull and a show animal. Forty-five Durocs in all came in one shipment from the Golden Glen herd of S. R. Quick & Sons, Gosport, Indiana. They are in the hands of men from whom they will do much good improving the swine of the state and in time be disseminated by means of the public auction as in western states. Some of the purchases were made with an idea of reselling after being bred to the excellent herd boars now heading the herds into which they have gone. Watch the gentlemen who had the means and inclination to make this splendid step for live stock improvement in Old Virginia.

W. C. Welch, Harveysburg, Ohio, writes us that Golden Rule, the hog that we give illustration of in this issue on page 6, was the winner at the international at Chicago three years ago; that he is the sire of winners at several of the leading State and county fairs. He is considered the best Poland-China boar in Ohio and a most excellent breeder of large, strong pigs with a world of finish.

Besides having one of the finest herds of Poland-Chinas in the State, Mr. Welch has a herd of forty head of well bred Jersey cattle, headed by cattle's St. L. Boy 62418, whose dam and grand-dam's average butter record is 22 lbs., 2 1-2 oz. in 7 days.

The U. S. Army and Navy are always throwing on the market a vast amount

Horse Owners! Use

GOMBAULT'S
Caustic Balsam
A Safe, Speedy, and Positive Cure

The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FLYING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
THE LAWRENCE-WILLIAMS CO., Cleveland, O.

No More Blind Horses For Specific Ophthalmia, Moon Blindness and others Sore Eyes, BARRY CO., Iowa City, Iowa, have a cure.

VETERINARY COURSE AT HOME.

\$1200 year and upwards can be made taking our Veterinary Course at home during spare time; taught in simplest English; Diplomas granted; positions obtained for successful students; cost within reach of all; satisfaction guaranteed; particulars free. Ontario Veterinary Correspondence School, London, Can.

Your Wife or Daughter Can drive your most fractious horse if she wears a Beery Bit. Horse is under perfect control at all times. Can be used on gentlest colts or runaway kickers with equal satisfaction. 10 days free trial. Prof. B. S. Beery, Pleasant Hill, O.

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BUY DIRECT FROM FACTORY
Get a better harness, made like you want it, and save money. Made of best oak-tanned, selected leather. Return at our expense, if not satisfactory, and get your money. Our illustrated catalog No. 7 with price list will surprise you. Sent free. Write.
The King Harness Co., 19 E. ST. DOWEGO, TIOGA CO., N.Y.

HOW TO GET MORE EGGS
Help your hens. Feed them fresh cut green bone and you'll get more eggs—you'll get eggs in winter when eggs are worth while. The Standard Green Bone Cutter prepares bone right for feeding quickly—easily. Prices \$8.50 and up, sold on guarantee—sent on trial. Write for catalog.
Standard Bone Cutter Co., Milford, Mass.

of equipment of one kind and another, especially harness, etc., made from the very best of material that can be found, at bargain prices. Farmers, when they know of these sales, can make good investments, but the trouble is that they do not get a chance at them as the large dealers gather them up in wholesale lots. Just now we wish to call the attention of our readers to the advertisement of Francis Bannerman, who is offering a lot of these goods for sale at very low prices. Look up the list in this issue and write at once.

Cutaway Harrow Co., Higganum, Ct., who manufacture the famous harrow that brings such large yields of Alfalfa and Red Top Hay, are advertising in this issue. They will send you some very valuable information on how to raise large crops of hay. If you will write them on the subject. Their Mr. Clark is probably one of the best posted men on this subject in the country. The subject is one that all our readers are interested in and you should not fail to get all the information you can.

DOES PRICE INTEREST YOU?

Any Farmer Can Now Buy an American Manure Spreader Direct, on time, for as Low a Price as an Ordinary Spreader Costs.

Here is a liberal offer that any responsible farmer ought to take advantage of. The American Harrow Co., of Detroit, Mich., have a new Selling Plan. They have stopped selling the celebrated American Manure Spreader through jobbers and dealers. They have taken the jobber's and dealer's profits off the price of the American Spreader and give the difference to the man who buys direct from them. The user gets the difference in the saving on this new low price.

Dealing direct with the user, they do more than that.

First—You write a postal and ask them to quote you this low price to see what a saving you now make.

Second—Without your sending them a dollar they will send you an American Spreader, all freight prepaid, and let you test it in your own fields 30 days FREE.

Third—Without cost to you, for anything, you test the American Manure Spreader to prove for yourself that it is all they claim for it in practical features. Then, if it isn't, you can send it back—they pay the freight both ways.

Fourth—If, at the end of 30 days' FREE trial, you find that the American is what they claim it, at the new low price, on liberal, easy time payments—letting the American pay for itself as it earns for you.

This is one of the fairest offers ever made to prove to you the merits of a machine that is universally recognized as the Standard Manure Spreader of the world. Just write a postal card to W. W. Collier, General Manager American Harrow Co., 11741 Hastings Street, Detroit, Mich., and he will write you a personal letter telling you all about this new selling plan. He will quote you the new low price and send you his FREE Catalog and FREE book on Fertilizing.

You'll be interested in this book. It tells you all about fertilizing land.

You'll be interested in the catalog. It illustrates the American Manure Spreader and all its parts and describes the machine fully, showing 40 per cent. more practical, exclusive features than any other Spreader has, and as a practical machinery man you'll enjoy reading this catalog. The book on fertilizing will give you many pointers on how to get the most out of your land. To benefit by this FREE offer you should write today. For a prompt personal reply address W. W. Collier, General Manager American Harrow Co., 11741 Hastings street, Detroit, Michigan. It will pay you to do this and get all this information promptly.

You Will Admit This is a Wonderful Report.

I bought Billy Mack, 211 1-4 for \$30, from an undertaker who was using him in his wagon and he was a miserable wreck. I took him because the party owed me some money. After I had him a few days several men told me what a great race horse he had been and how they raced him. I thought once a race horse always a race horse. I sent for 25 lbs. of International Stock Food and fed it as directed. In 90 days not a man at the Guttenberg track knew the horse. He is about 17 years old and was raced all his life. I trained him as well as I knew how and the first time I raced him last spring I beat every horse at Guttenberg, trotting a half mile in 1.09 and coming back the second heat in 1.10. After that I started him against the best horses and beat every one. He could trot the first quarter in 22 any day. Now this is due to International Stock Food and say what they will. I have eaten the pudding and know how it tastes. The reason I write so late about this great thing International Stock Food has done, is because I have given it another test on a pacer I have, Dean Swift. I wintered him myself and your books will show I bought 50 lbs. of International Stock Food last fall and I have got the results again. My horse looks as fine as silk and eats better than ever and is always fighting. Jog him 10 miles every day and must beg him to

go in 2.50. He can go in 2.30 today, is big and strong and his condition is as I said, due to International Stock Food. I am training him myself and remember I am not a trainer, but he will lower his mark this year if any horse will. Will weigh 150 lbs more than last spring and is eating ten quarts of oats a day, a thing he never done. You may know a lot about your International Stock Food, but when you see the photos before and after, you will learn a little more. Yours very truly, WM. NECKER.

A First-Class Bone Cutter.

The marked increase in egg production caused by feeding cut green bone, has resulted in the placing on the market of numerous machines for the production of this material.

Competition in the Bone Cutter business has become so keen, that it is interesting to note the superior advantages possessed by the Standard Bone Cutter, manufactured by the Standard Bone Cutter Co., of Milford, Mass.

Some of the especially good features of their machines are the positive automatic feed, horizontal cylinders and the knives in the cutter plate being always in view. These knives are arranged in such a way as to cut across the grain of the bone. It is claimed these three points give this machine superior excellence over any other bone cutter at present manufactured, and this is the only machine possessing a positive automatic feeding arrangement.

This concern has been in this line of business for fourteen years and has established a reputation for fair dealing which places it among the reliable institutions of the country. They ship their machines on trial and if the purchasers do not find them exactly as



represented, they offer to refund the money.

Some of the larger firms engaged in the wholesale production of Cut Green Bone are numbered among their customers. Among these might be mentioned such concerns as the Consolidated Rendering Co., of Boston, Mass., who use Standard machines in their plants in Maine, New Hampshire and Vermont.

Any one contemplating the purchase of a bone cutter, should by all means, send for the Standard Bone Cutter catalog, which will be sent free on request by addressing The Standard Bone Cutter Co., of Milford, Mass. When writing kindly mention this paper.

FREE TO YOU

Our booklet fresh from the printer, tells you how to treat Hog Diseases successfully with Nitroline, acknowledged to be the greatest remedy of its kind known. Every breeder or farmer who feeds hogs should have a copy of this booklet, and we are willing to mail it to you free on receipt of a request. To know how to treat Hog Cholera of your herd should interest you. Send postal to-day. NITROLINE MFG. CO., B. 409, Walnut St., St. Louis, Mo.

Professor B. S. Berry, of Pleasant Hill, Ohio, the manufacturer of the "Berry Bit" advertised in this issue, has given exhibitions in all the leading cities for the past seventeen years and has instructed the public in the art of proper horsemanship and during that time he has handled all kinds of vicious horses, such as kickers, shyers, bolters, luggers, runaways, balkers and horses afraid of automobiles, street and steam cars, etc., and is considered authority on the subject of

BLOODED STOCK for December.

colt training and the subjection of horses with bad habits. The Berry Bit that he advertises is the result of his experience and by its use the above named habits can be eradicated in a short time regardless of whether the user of the bit is a horseman or not. The bit is not complicated in any manner but is so arranged that by merely readjusting the lines, the bit can be instantly changed from the easiest to the most severe bit ever used. Circulars giving full description of this bit and how it can be secured on ten days free trial will be sent anyone that will write to the Prof. at headquarters: Pleasant Hill, Ohio.

Angus Cattle

as good as the best. Must sell 15 choice bulls quick to make room. Write for bargains.

MYERS & SON, Bridgeville, Del

PURE BRED HOLSTEINS

(Cornucopia and Sarcastic Lad Strains)

All Breeders wish this Blood

Also O. I. C. (Ohio Improved Chester

Swine, Angora Goats and

Scotch C lies

FAIRVIEW FARM

W. CRUSER, Prop Montrose, Pa.

FOR SALE

Splendid butter bred Holstein bull, King Segis Perfection, born Feb. 20, 1904. Dam—Clothilde Clara, a large producer of Clothilde, Netherlands, and Pieterje breeding. Sire—King Segis. First Prize bull, N. Y. State Fair, 1905. His dam has official record of 26.9 lbs. butter in 7 days, dam's dam over 28 lbs., and sire's dam over 29 1/2 lbs. The young bull we offer is handsome, well developed, beautifully formed, largely white in color. A great bargain at \$60.00, with all papers. First order takes him.

The Stevens Brothers-Hastings Company

Brookside Herd, Lacon, N. Y.

Farms at Lacon and Liverpool (near Syracuse).

Aldoro Farm, Rosston, Pa.

Guernsey Cattle Berkshire and Large Yorks shire Swine.

BERKSHIRES

We offer some splendid boars at \$20, \$25 and \$30 each. These are royally bred and ready for service. We have August and September pigs in pairs and trios not akin from the very best stock, and of the correct type. Pigs sired by Baron Duke 63d, Prince Premier, Paymaster, Pastmaster 3d, Sterling of Baltimore, King Hunter and other noted sires.

YORKSHIRES

A beautiful lot of July, August and September pigs out of imported sows. Our breeding stock consists of the best we could buy in England and Canada. One of our herd boars was grand champion at the New York State Fair last year. Pigs in pairs and trios not akin.

GUERNSEY CATTLE

A few bull calves by World's Fair winners. Write for detailed description. Our prices are very reasonable.

Fifty White Wyandotte Cockerels, Duston's breeding, at \$2.50 each.

BLOODED STOCK for December.

Of Value to Horsemen.

Do you turn your horses out for the winter? If so, we want to call your attention to a very important matter. Horses which have been used steadily at work, either on the farm or road, have quite likely had some strains whereby lameness or enlargements have been caused. Or perhaps new life is needed to be infused into their legs. Gombault's Caustic Balsam applied as per directions, just as you are turning the horse out, will be of great benefit; and this is the time when it can be used very successfully. One great advantage in using this remedy is that after it is applied it needs no care or attention, but does its work well and at a time when the horse is having a rest. Of course it can be used with equal success while horses are in the stable, but many people in turning their horses out would use Caustic Balsam if they were reminded of it, and this article is given as a reminder.

The Farmer as a Veterinarian.

How far can a farmer safely and profitably go in attending to his stock when they are suffering from disease or injury? The question must be answered differently in different places. In some suburban districts where a high grade veterinarian is of easy access the farmer's part in the matter will be first aid to the injured, but in



remote places he must be his own doctor or let his stock go without attendance and perhaps lose them.

What should he have for giving the necessary care to his stock? First, a case of Cattle Instruments such as illustrated here, containing also a Milk Fever apparatus. This outfit allows him to treat milk fever, obstructed teats, bloat in cattle, flatulent colic of the horse, and by means of the thermometer to ascertain the temperature of all sick animals. This represents the least the farmer must have. Second, in addition to this the "up-to-date" man will have his own Tuberculin Outfit for testing cattle for tuberculosis, a Garget apparatus, a Dose syringe, a Rectal Syringe, and an Artificial Impregnator. If this outfit, which may be obtained from George P. Pilling & Son Co., 2224 Arch street, Philadelphia, Pa., is well cared for it will more than repay its cost every year and one case of milk fever saved will pay the entire outfit half a dozen times.

Profit for You.

The little book "Farm Science," but recently off the press, is justly regarded as the equal in practical suggestions, plain teachings, and unquestioned authority, of anything ever published exclusively for the farmer. Its character will be seen when we say that it was specially prepared for The International Harvester Company of America, Chicago, at an expense of several thousand dollars.

The book treats exhaustively such live present day farm subjects as Fertilizing, Preparation of Soil, Crop Growing, Alfalfa, Hay, Small Grains, the Dairy and Farm Powers. Best of all, every one of these topics is handled by a specialist—men of large practical experience in addition to being scientifically qualified to speak on matters in their line. The authors are Jos. E. Wing, expert agriculturist,

Ohio; Prof. P. G. Holden, the Corn Culture expert, Iowa; W. F. Brown, farm specialist, Ohio; C. G. Hopkins and Prof. Fred R. Crane, of the Illinois College of Agriculture; Prof. Thomas Shaw, late of the Minnesota Experiment Station; Prof. Clinton D. Smith, Director Michigan Experiment Station; Hon. Willett Hays, Assistant Secretary of Agriculture, Washington, D. C. The 128 pages of the book are taken up by these eight specialists on their chosen subjects, so it will be seen with what thoroughness each topic is treated.

The book is meeting the demand among farmers which it deserves. A large edition is being rapidly exhausted. It is only necessary to send in the postage for its mailing, three 2-cent stamps, to receive a copy. We advise our readers to send for it promptly before the issue is exhausted.

Finest Thing Ever Used.

Cherry Run, W. Va., Feb. 7, 1906.

Dr. J. B. Kendall Co., Enosburg Falls, Vt.

Dear Sirs:—Please send me your book called "A Treatise On The Horse." I have used your spavin cure and find it the finest thing I ever used.

I remain, Yours truly,

Eugene G. Butts.

Primrose Herd Large English Yorkshires.

From Imported Stock. Second to none. Write wants.

A. A. BRADLEY, Frewsburg, N. Y.

Raise 1000 Pound Hogs

Why lose profits breeding and feeding scrub hogs? Two of our O. I. C. hogs weighed 860 lbs. We are headquarters for breeders. Will send sample pair of our famous

O. I. C. HOGS

on time, and give agency to first applicant. We are originators most extensive breeders and shippers of thoroughbred swine in the world. Write for circulars.

L. H. SILVER CO., 337 Caxton, Cleveland, Ohio.

U. S. Government inspected herd

FOR SALE

Extra Fine This Falls

50 Poland-China Pigs 50

Sired by Ohio's noted hog Golden Rule, and out of splendid well bred matured sows. These pigs are extra fine and will be sold cheap if taken soon. Give me an order and see if I don't please. You can get winners for next years fair, and buying them small the express is light. Satisfaction Assured.

W. C. WELCH

Harveysburg, Warren Co., O.

STONE FARM BERKSHIRES

One Hundred Fall Pigs

Out of large prolific Sows, sired by Imported Lord Akin S. 64146, and sons of Masterpiece No. 77000, Lord Premier No. 50001, Baron Premier 3d 75021. Also offer twenty-five Yearling Sows, and thirty Spring Gilts, bred to the above Boars for Spring farrowing. Five Yearling Service Boars and twenty Spring Service Boars. Also a few unbred Spring Gilts. Orders filled promptly. We have over two hundred head to select from.

RICHARD H. STONE, Trumansburg, N. Y.

DUROCS of the Most Fashionable Breeding

Boars. Pigs and Sows

In pig to some of the greatest herd boars in the west. The quality is of the kind that will do the purchaser good. The prices are right. Our guarantee goes with every animal.

LESLIE D. KLINE,

Vaughn, Va.

The Lincoln Waterproof Cloth Co., Bound Brook, N. J., who have been advertising a very superior roofing, have an illustrated booklet that will give our readers a great deal of information concerning roofing. This is a subject that every farmer is up against, and when he comes to put a new roof on he should be posted as to how to get a first-class roof at

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent, or exchange, poultry, supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants and vegetables. The cost of advertising is

Only Two Cents a Word, all classified. Each initial or number counted as one word. No advertisement taken for less than 25 cents each issue. All replies must be sent direct to advertisers. Cash covering the exact number of words at 2 cents each must be sent with every order.

This Department for Live Stock Only.

CATTLE.

SUNNY SLOPE HERD of Red Polled Cattle—the beef and dairy breed. Choice young stock for sale. L. H. WALKER, Reed, City, Michigan.

JERSEYS—Combination and Golden Lad. For sale—10 cows, 10 heifers and 20 bulls. S. E. NIVIN, Landenberg, Pa.

HOGS.

Registered Duroc Pigs for sale. WALTER M. CARROLL, Box 106, Lynchburg, Va.

Registered Duroc Jersey males and sows, that have the quality and finish. Polish, Spanish and Pekin Cayuga Ducks. L. C. COLEMAN, Mt. Pleasant, Iowa. Route 2, Box 91.

REGISTERED DUROCS—Pairs and trios not akin. Stock of all ages for sale. WM. HARSHMAN, Utica Mills, Md.

GET SOME Improved Large Yorkshire Pigs. Hundreds are glad they have these pure breeds. Price low. Money back if not satisfied. Write now. HARRY B. BILLINGTON, Wells, Minn.

MISCELLANEOUS

South Jackson Stock Farm. Registered Large English Yorkshires—the prize herd of Michigan. Stock the get of Jackson Boy, the Grand Champion ship boar of Michigan. GALLUP & TOWNLEY, Proprietors, Jackson, Mich. R. D. No. 6.

SPORTING and Pet Dogs, Cattle, Sheep, Swine, Pigeons, Ferrets and Rabbits. Ten cents fifty-six page illustrated catalogue. C. G. LLOYDT, Dept. 2B, SAYRE, PA.

JUMBO HOMERS for Squab Breeding \$1.00 per pair. Send for free book. PROVIDENCE SQUAB CO., Providence, R. I.

GREEN BONE and Clover Cutter, Shell and Grain Grinder combined. Single Comb Rhode Island Reds. Circular free. L. H. STEWART, Erie, Pa.

POULTRY

WHITE and BARRED Plymouth Rock fowls and Mammoth Bronze Turkeys. R. H. McFADYEN, Oxford, Pa.

ROSE COMB Brown Leghorns. A choice lot of cockerels at \$1.50 each. Best strains. Farm raised and healthy. LEONARD PELLETT, Route 3, West Liberty, Ohio.

medium cost. We would advise everyone to secure this booklet.

Leslie D. Kline, Vaucluse, Va., attended the sale at Gosport, Ind., last month and bought a corral of Duroc Jerseys. He is now offering a part of this corral to Eastern breeders. They can be bought at very reasonable prices, and as he got the finest breed in the west, eastern breeders should not fail to take advantage of this opportunity of saving express. Write Mr. Kline at once.

GREAT DUROC SALE.

One of the best sales, if not the best Duroc swine sale of the season, was made by S. R. Quick & Sons, Incorporated, at their Golden Glen place, Gosport, Indiana. A large majority of the offerings were of spring, 1906, farrow, considering which makes the average of over \$30 a wonderful sale. No phenomenal prices were reached, but the highest being \$70 for a young sow bred to "East Him If You Can," for one-third interest in which great hog weighing 710 lbs. Messrs. Quick bought at \$1000, making him a \$3000 hog.

There was an unusual lot of representative breeders in attendance from Indiana, Illinois, Ohio, Kentucky and Virginia. Twenty-six head of the sixty in sale were bought by Virginia breeders, a very pleasing occurrence for Virginia. These Virginia buyers have all before made purchases of Quick & Sons, and they have proven so satisfactory that more were selected. See our article on Virginia Durocs. Following are the buyers and prices paid of \$15 and over:

Walter Skinner, Greensburg, Ind.,	\$25
R. W. Shafer, Westport, Ind.,	58
Sandy, Flint & Sandy, Cloverdale,	20
H. H. Montgomery, Spencer, Ind.,	15
L. D. Kline, Vaucluse, Va.,	51
N. C. Gray, Gosport, Ind.,	16
R. W. Shafer, Westport, Ind.,	22
John W. Rice, Winchester, Va.,	30
W. H. Smith, Shelbyville, Ind.,	41
J. W. Rice & Son, Winchester, Va.,	25
J. W. Rice & Son, Winchester, Va.,	31
L. D. Kline, Vaucluse, Va.,	20
L. D. Kline, Vaucluse, Va.,	35
Headick Bros., Gosport, Ind.,	15
L. D. Kline, Vaucluse, Va.,	15
L. D. Kline, Vaucluse, Va.,	20
C. R. Amos, Shelbyville, Ind.,	26
L. D. Kline, Vaucluse, Va.,	20
D. Williams, Ellettsville, Ind.,	17
J. W. Rice & Son, Winchester, Va.,	31
J. D. Williams, Ellettsville, Ind.,	18
L. D. Kline, Vaucluse, Va.,	16
Epitomist Pub. Co., Spencer, Ind.,	30
J. D. Williams, Ellettsville, Ind.,	21
J. W. Rice & Son, Winchester, Va.,	22
J. W. Rice & Son, Winchester, Va.,	24
L. D. Kline, Vaucluse, Va.,	35
R. W. Shafer, Westport, Ind.,	30
R. W. Shafer, Westport, Ind.,	43
H. R. Griffith, Boston, Ill.,	35
H. E. Watson, Ellettsville, Ind.,	70
J. W. Rice & Son, Winchester, Va.,	37
F. Overmyer, Galveston, Ind.,	26
J. W. Rice & Son, Winchester, Va.,	30
J. W. Rice & Son, Winchester, Va.,	31
J. W. Rice & Son, Winchester, Va.,	24
L. D. Kline, Vaucluse, Va.,	20
J. W. Rice & Son, Winchester, Va.,	27
J. W. Rice & Son, Winchester, Va.,	57
W. T. Rice, Golden Gate, Ill.,	52
L. D. Kline, Vaucluse, Va.,	15
L. D. Kline, Vaucluse, Va.,	16
L. D. Kline, Vaucluse, Va.,	15
L. D. Kline, Vaucluse, Va.,	26
Sandy, Flint & Sandy, Cloverdale,	18
J. W. Rice & Son, Winchester, Va.,	17
J. K. Northcott, Cynthia, Ky.,	15
J. R. Woodson, Ball, Ind.,	30
J. E. Swane, Frankfort, Ind.,	29
Cannon & Co., New Castle, Ind.,	26
J. W. Rice & Son, Winchester, Va.,	34
L. D. Kline, Vaucluse, Va.,	25
L. D. Kline, Vaucluse, Va.,	15
J. D. Williams, Ellettsville, Ind.,	15
W. R. Phillips, Orleans, Ind.,	16
W. R. Phillips, Orleans, Ind.,	18
J. Dunkin, Selma, Ind.,	15
W. R. Phillips, Orleans, Ind.,	17

Mention Blooded Stock when writing advertisers.

After studying the question, the Illinois station found that it required on an average one minute to each cow, or two minutes a day, and that

BLOODED STOCK for December.

when milk is weighed and tested every seventh week, as is customary with some dairymen about one hour and thirty-eight minutes is required yearly for each cow tested. With this amount of time expended the farmer can have a reasonably accurate dairy record of every cow in his herd.

If you have stock for sale advertise it in Blooded Stock.

It is a matter of the greatest importance that the breeder be a man of recognized ability and unquestioned integrity. There is so much dependent on a man's method and management that the first point is of vital importance, and the opportunities for error or downright falsehood are so great that the least question as to honesty should be carefully heeded.

See page 3 for subjects for 1907.

When a bull cannot be worked or turned loose in a paddock or yard or small pasture, he may be provided with an overhead cable stretching from one end of the yard to the other and upon which runs a large ring attached to a chain which may be snapped on to the bull's halter or ring.

Send us your subscription at once.

QUICK DUROGS

\$15.00 pair not akin.

Bred Sows and Glits, Shorthorns, Polled Durhams, Shropshires, Scotch Collies. Write for particulars.

S. R. QUICK & SONS, Gosport, Ind.,

Chester Whites

For years I have been selecting and breeding to build up a herd that would be uniform in shape, stamping other herds with the good qualities that I had succeeded in fixing in my herd. If in need of first-class Chesters come and see me or write your wants. Only the best sold for breeders.

T. A. STEVENSON, Shannon City, Ia.

Bursonville, Bucks Co., Pa. GREEN WOOD STOCK FARMS

Farmers and Breeders I now have a large stock, probably the best I ever owned, thoroughbred Poland-Chinas and Chester White Pigs, 2 to 6 mos. old, sows bred ready for service, all from prize winning stock. Guernsey and Jersey Cattle, Buff and Barred Plymouth R. Chickens.

Farms and Residence, Greenwood, Pa. Address C. H. DILLING, Rohrsburg, Pa. Route No. 1.

POLAND-CHINAS

of Best Strains

Growthy, lengthy glits, good bone, coat and head and fancy ears. Sold bred or open. Priced to sell, as I need the room. Satisfaction guaranteed. (Also September Pigs.) Write for circulars and particulars to

A. F. SIEFKER
St. Charles Co., DEFIANCE, MISSOURI

BLOODED STOCK for December.



Receipts of cattle at Chicago during the month of November numbered about 329,000, a gain of 9,000 over the corresponding month a year ago, but about 28,000 less than arrived during the preceding month of October. Prices on the whole have held up well, though short-fed stuff had to sell at a wide discount as compared with the well-finished kinds, particularly during the first half of the month, when western rangers were arriving freely. Now, however, the supply from that source is practically ended, and from now on there will be a wider demand and better outlet for all grades of corn-fed stuff. Just at this time there is a big demand for choice and fancy beefs for the Christmas trade and a few of such have sold up to \$7.60, but this is no criterion of the general market. Feeders and shippers in the country may figure that unless their cattle are exceptionally choice they will land under the \$7.00 mark rather than above it, and \$7.25 to \$7.35 may be regarded as practically an extreme top of the market as far as the general trade is concerned, although this limit will no doubt be entirely lost sight of this week as concerns fancy gilt-edged beefs for the holiday demand, and prize-winners at the International Live Stock Exposition now going on, which may reach almost any price. We quote: Choice to extra prime steers, \$6.80 @ \$7.40; good to choice steers, \$6.10 @ \$6.80; medium to good dressed beef steers, \$5.40 @ \$6.60; common to fair steers, \$4.60 @ \$5.25; good to choice corn-fed yearlings, \$5.00 @ \$6.00; fair to good corn-fed yearlings, \$4.25 @ \$5.25; fair to choice stags, \$4.25 @ \$5.00; common to fair butcher stags, \$3.50 @ \$4.25.

The butcher stock market is rather dull and lifeless just now, at the following range of quotations: Extra prime corn-fed heifers, \$5.25 @ \$5.50; prime corn-fed heifers, \$4.40 @ \$4.75; good corn-fed heifers, \$3.90 @ \$4.25; medium corn-fed heifers, \$3.40 @ \$3.65; good grass heifers, \$3.40 @ \$3.65; medium to fair grass heifers, \$2.75 @ \$3.25; common grass heifers, \$2.00 @ \$2.50; extra prime corn-fed cows, \$3.85 @ \$4.25; medium corn-fed cows, \$3.25 @ \$3.50; fair corn-fed cows, \$3.00 @ \$3.25; best grass cows, \$3.40 @ \$3.75; medium grass cows,

\$3.15 @ \$3.30; fair grass cows, \$2.65 @ \$2.85; best cutters, \$2.35 @ \$2.50; common cutters, \$2.40 @ \$2.65; best canners, \$1.50 @ \$1.75; very common canners, .75 @ \$1.25; extra prime export bulls, \$4.00 @ \$4.25; good export bulls, \$3.65 @ \$3.90; prime butcher bulls, \$4.00 @ \$4.25; good butcher bulls, \$3.60 @ \$3.90; medium butcher bulls, \$3.25 @ \$3.50; good half fat bulls, \$2.90 @ \$3.25; medium half-fat bulls, \$2.50 @ \$3.15; best bologna bulls, \$2.50 @ \$2.75; medium bologna bulls, \$2.50 @ \$2.65; common bologna bulls, \$2.25 @ \$2.35; distillery bulls, \$4.00 @ \$4.25; prime veal calves, \$6.50 @ \$7.50; medium to good veal calves, \$5.00 to \$5.50; fair veal calves, \$4.00 @ \$5.00; common veal calves, \$3.50 @ \$4.50; prime heavy calves, \$4.00 @ \$4.25; fair to good heavy calves, \$3.50 @ \$3.75; common heavy calves, \$2.75 @ \$3.25.

We would not be at all surprised to see stockers and feeders sell considerably higher after the first of the year, and advise persons contemplating laying in supplies of these classes to send in their orders now. Following is current range of prices: Fancy selected feeders, 1050 to 1150 lbs., \$4.25 @ \$4.60; good to choice feeders, 900 to 1000 lbs., \$4.00 @ \$4.20; fancy selected stockers, 600 to 800 lbs., \$4.00 @ \$4.25; good to choice stockers, 600 to 850 lbs., \$3.60 @ \$3.85; fair to good stockers, 500 to 850 lbs., \$3.25 @ \$3.50; medium to fair stockers, 500 to 850 lbs., \$2.75 to \$3.20; inferior to common stockers, 500 to 850 lbs., \$2.25 @ \$2.75; good to choice stock heifers, 500 to 700 lbs., \$2.80 @ \$3.00; fair to good stock heifers, 500 to 700 lbs., \$2.40 @ \$2.75; fair to good thin young cows, 650 to 900 lbs., \$2.25 @ \$2.50; good to choice feeding bulls, 800 to 1100 lbs., \$2.25 @ \$2.50; heifers and heiferish cows (fair killers) 700 to 900 lbs., \$3.00 @ \$3.65.

Receipt of hogs for the month of November shows a loss of nearly 150,000 as compared with the same month last year. Present prices show a decline of 15 to 25 cts. for the first of the month, but they are still \$1.15 to \$1.30 higher than a year ago. Today we quote choice heavy hogs \$6.20 to \$6.30; choice lights, \$6.10 to \$6.20, and packers at \$5.90 to \$6.00. Quality for the month past has been just fair. We look for a fair run of hogs for the month of December and for prices to remain about the same as during November.

Following is present range of sheep and lamb prices: Good to choice export wethers, \$5.60 to \$5.75; fair to good wethers, \$5.25 to \$5.35; good to choice heavy ewes, \$5.30 to \$5.40; medium ewes, \$4.25 to \$4.90; culls and tail ends, \$2.50 to \$3.50; choice yearlings, \$6.15 to \$6.25; fair to good yearlings, \$5.50 to \$5.90; choice spring lambs, \$7.50 to \$7.65; fair to good spring lambs, \$7.10 to \$7.35; common to fair spring lambs, \$6.25 to \$7.00; cull spring lambs, \$5.00 to \$6.00.

Following quotations (feeding grades excepted) are for fed western stock: Choice export wethers, \$5.50 to \$5.65; choice light western wethers, \$5.40 to \$5.50; fair to good western wethers, \$5.15 to \$5.25; choice feeding wethers, \$5.00 to \$5.10; fair to good feeding wethers, \$4.90 to \$5.00; choice 2 and 3 year old breeding ewes, \$5.50 to \$5.75; choice western killing ewes, \$5.15 to \$5.25; fair to good western ewes, \$4.75 to \$5.00; feeding ewes, \$3.50 to \$4.25; culls, \$3.00 to \$3.50; choice western yearlings, \$6.10 to \$6.25; fair to good fed western yearlings, \$5.75 to \$6.00; choice feeding yearlings, \$5.60 to \$5.65; fair to good feeding yearlings, \$5.40 to \$5.50; choice western lambs, \$7.50 to \$7.60; fair to good western lambs, \$7.15 to \$7.40; choice feeding lambs, \$6.65 to \$6.75; fair to good feeding lambs, \$6.25 to \$6.50.

RED POLLED CATTLE CLUB.

Notice is hereby given that the 24th annual meeting of the Red Polled Cattle Club of America will be held at the Live Stock Record Building, Union Stock Yards, Chicago, Ill., on Thursday, December 24th, 1906, at 2 p. m.

HARLEY A. MARTIN, Sec.

COTOCTIN STOCK FARM

Large English Yorkshire

Sired by "White Side Comet, No. 4726," son of "S. H. C." son of "Hippie," winner of first in his class, also champion and Grand Champion, over all ages at St. Louis Fair, 1904. Pigs of either sex and sows bred for sale at reasonable prices.

CHAS. S. SNOOK, Utica Mills, Md.

CHAMPIONS

CHESTER WHITES

PRESCOTT BOY Twice winner at the Iowa State Fair; will have fine sows bred to him for sale. Some extra choice stock. Write

J. H. MAHANNAH,
North English, - - - Iowa.



The Secretaries Corner

Live-Stock Meetings at the International.

In addition to the practical demonstrations of the breeders' and feeders' art in cattle, horses, swine, and sheep on exhibition in single groups and carload displays, we are to have this year meetings of breed associations where the foremost breeders and feeders of our day are to discuss their work. Papers of practical value to the agriculturist and live stock men of America, on subjects of immediate interest that may confront our people, will be read and discussed.

On Monday night, December 3, the annual meeting of the International Exposition Association is to be held.

On Tuesday night, the following breed associations meet: Percheron Society of America; American Shire Horse Association; American Cotswold Sheep Society; American Oxford Down Association; American Suffolk Flock Registry; American Clydesdale Horse Association; American Southdown Breeders' Association.

On Wednesday evening the following meet: The American Shorthorn Breeders' Association; The American Aberdeen-Angus Association; The American Galloway Breeders' Association; The American Berkshire Association; and the Hampshire Down Breeders' Association.

On Thursday afternoon the American Red Polled Cattle Club holds its meeting, followed by the American Poland-China Breeders' Association, and the Yorkshire Swine Association in the evening.

The hour, room, and other particulars concerning each of these meetings will be posted on the bulletin boards of the show grounds during the week. Every one interested in live stock of any kind should make an effort to attend these meetings.

A Dollar an Ear for Corn.

The Pennsylvania Live Stock Breeders' Association announces that one of the features of its annual meeting at Harrisburg, January 22-25, 1907, is a Corn Show, open to all corn growers of the State whether they are members of the Association or not. Liberal prizes are offered for corn, 10 ears of which will constitute an exhibit, and these prizes are in cash. The National Stockman and Farmer of Pittsburgh has contributed \$100 in cash to encourage this exhibit, and to this the Association and the Department of Agriculture will add enough to make the prizes worth competing for. There will be 45 cash prizes, besides specials. This is Pennsylvania's first great Corn Show, and it should bring out a lot of fine grain, some of which may be used later in exhibits at Jamestown or other Expositions. Every corn grower who can find ten ears of choice corn when he goes to husk it has a whack at the money. He should write at once to E. S. Bayard, Secretary, 203 Shady Ave., East End, Pittsburgh, for particulars and enroll himself as a contestant. A postal card will do it. Prize list will be forwarded on application to the Secretary.

The American Chester White Record Association, at their annual meeting, January, 1906, appropriated the sum of \$250 for prizes at the following state fairs: Ohio, Indiana, Illinois, Iowa, Texas, Wisconsin, West Virginia, Mich-

igan, New York, Kentucky, Missouri. These prizes were won and paid to the following named breeders: J. W. L. Motherspaw & Son, Newark, Ohio, \$10; Ohio State Fair; W. T. Dever, Lucasville, Ohio, \$5; Ohio State Fair; L. H. Martin, Alexandria, Ohio, \$10; Ohio State Fair; W. T. Dever, Lucasville, Ohio, \$25; New York State Fair; J. W. L. Motherspaw & Son, Newark, Ohio, \$25; West Virginia State Fair; J. H. Kroh, Hillsdale, Michigan, \$25; Michigan State Fair; Humbert & White, Nashua, Iowa, \$15; Wisconsin State Fair; W. W. Vaughn, Lyon, Wisconsin, \$5; Wisconsin State Fair; William J. Kelly, Edmund, Wisconsin, \$5; Wisconsin State Fair; Humbert & White, Nashua, Iowa, \$15; Illinois State Fair; H. C. McCandless, Barclay, Illinois, \$10; Illinois State Fair; J. H. Mahannah, North English, Iowa, \$10; Iowa State Fair; Humbert & White, Nashua, Iowa, \$10; Iowa State Fair; L. C. Reese, Prescott, Iowa, \$5; Iowa State Fair; Nunnally Brothers, Readsville, Mo., \$10; Missouri State Fair.

The Annual Meeting of this association will be held at Columbus, Ohio, January 16, 1907.

The Chicago Show.

The Annual Poultry, Pigeon and Pet Stock Show to be held in Chicago January 23 to 30th, inclusive, 1907, will be an improvement on any of the series of high class shows heretofore held under the management of the National Fanciers' and Breeders' Association. The exhibit of stock, incubators, brooders, appliances, foods, remedies and all things pertaining to the poultry, pigeon and pet stock industry have at all times taxed to the utmost, the capacity of the largest hall obtainable.

Premium lists giving names of judges and the varieties to be passed upon by each of them, and all necessary information to the intending patrons will be issued about December 15th, 1906. Twenty thousand will be mailed out and it is the intention to have one sent to every interested person, but if for any reason it is not received or additional copies are desired, write to the secretary, Fred L. Kimmer, 325 Dearborn street, Chicago, Ill.

Ayrshire Breeders' Association.

The thirty-second annual meeting will be held at the New Bingham Hotel, corner of Market and Eleventh street, Philadelphia, Pa., December 18, 1906, at 2 p. m. Members not expecting to be present will please fill in the name of some person who will attend the meeting, on proxy, sign and return to the Secretary as soon as possible. The object is to insure a quorum for business.

C. M. Winslow, Sec'y., Brandon, Vt.

Volume LXI of the American Jersey Cattle Club's records has just been issued. This volume includes the bulls admitted to registration from 69,001 to 70,500 and the females from 184,001 to 189,000. There are a total of 352 tests reported, and they are good ones, too, and cover less than a year, being from August 1, 1905, to July 1, 1906. Private butter tests number 139, and the authenticated fat estimates are next with 129. There are also 14 private fat estimates, 7 private milk records and 3 confirmed butter tests.

The American Association of Importers and Breeders of Belgian Draft Horses will hold its Fifteenth Annual Meeting at Grand Pacific Hotel, Chicago, Wednesday, December 5th, 1906, at 7:30 o'clock P. M.

Peter Hopley, President,
J. D. Conner, Jr., Secretary.

The next annual meeting of the Michigan Dairyman's Association will be held in the Masonic Temple, at Saginaw, Feb. 13, 14, 15, 1907. The exhibit of the dairy machinery and products will be held in the armory which is on a ground floor and about one block from the Temple.

S. J. Wilson, Sec'y., Flint, Mich.

The Annual Meeting of the Western New York Jersey Cattle Breeders' Association will be held in connection with that of the New York State Breeders' Association, at Syracuse, N. Y., upon Wednesday, December 19th, 1906. The meeting will be called to order in the Assembly Room at "The Yates" Hotel at 10 o'clock A. M. It is earnestly urged that all members as well as all persons that may be interested in the Jersey Cow be present and assist us in re-organizing the association, and placing it upon a firm basis.

The 17th volume of the Advanced Register of Holstein-Friesian cows is now ready for distribution, and will be sent, without special request and free of charge, to all members of the association who have made application for the herd-book, through the return postals sent out to all members by Secretary Houghton. Members of the association should bear in mind that the herd-books of the association are only sent out upon request; so if any who wish it fall to get the Advanced Register in due time, it will be simply because they have neglected to reply to Secretary Houghton's card.

Mr. Charles C. Glen, Secretary of the Percheron Registry Co., Columbus, O., writes that the second volume of the Percheron Register, covering registrations for the year 1905, is now ready for distribution. This volume contains 450 pages, and is without doubt the most complete book of its kind ever published.

Only a limited number of copies of this book has ever been printed, and we desire to urge all horse breeders who may desire a copy of this book to send in their order at once before the supply is exhausted. Already a large number of advance orders have been received. Every horse breeder and importer should have this volume in his library as well as the first volume. Both volumes will be sent, postpaid, for \$4.50. Single copies of Volume II will be sent for \$3.50, and single copies of Volume I for \$1.50.

Kenton Herd

DUROC - JERSEYS.

Bred Right, Fed Right and are Right. Choice Pedigreed Service Boars, Spring Gilts and Fall Pigs; all growthy, useful animals; from large litters.

AT REASONABLE PRICES.

W. H. ROBBINS, Springfield, Clark County, Ohio.

HOG CHOLERA

The Problem of a Cure is now Solved

Dr. J. H. Snoddy, of Alton, Ill., has discovered a positive cure and preventive for this terrible disease. He has had it in use for ten years and has saved millions of dollars' worth of cholera hogs for the public. The directions for its use are simple and easy to follow. Any practical farmer can stop the worst outbreaks of cholera that ever come and save every hog that is able to take the treatment.

The following breeders and well known hog raisers have tried the remedy and recommend it highly. T. T. Schouler, Supt. City Home Farm, Worcester, Mass; J. E. Hendrickson, Commission Merchants, Philadelphia, Pa. and Dr. David Alkire, of Marco, Ind., and many others.

Dr. Snoddy has published a small booklet that gives full directions and tells all about it. This little booklet will be mailed free to every person who will write for it. Every farmer and hog raiser should write at once for one of these little booklets. They are free. Address

THE SNODDY REMEDY Co., Box 290, ALTON, ILL.

The Annual Meeting of the New England Holstein-Friesian Club was attended by about 60 cattle breeders October 31st at the Shrewsbury Farm of General Charles W. Wood. Twice the number in attendance were expected, but the rain prevented many from attending.

General Wood, president of the New England Holstein Club, called the business meeting to order in his parlor, and on account of the secretary having left his books in the Boston station, the reading of minutes of the first meeting was dispensed with and President Wood addressed the Club.

On motion of F. L. Houghton a vote of thanks was tendered General Wood for the carefully prepared address and for his work in behalf of the club during the past year.

It was also voted that the address C. W. Wolcott gave the treasurer's report, which showed 152 members, receipts \$153, expenditures \$138.72, principally for printing and postage, and including \$30 for travel of secretary to three places; cash on hand \$22.12; all known bills paid.

The next business was the election of officers and resulted in the following board of officers being elected by acclamation: President, Charles W. Wood, Worcester; secretary-treasurer, C. W. Wolcott, 506 Exchange building, Boston; executive committee, H. S. Cheney, Southbridge; Fred F. Field, Brockton; F. L. Houghton, Brattleboro, Vt.; vice-presidents, W. S. Keene, Palmyra; Me.; R. C. Goodell, Antrim, N. H.; J. D. Roberts, Salmon Falls; C. S. Bailey, North Anson, Me.; M. F. Roberts, Rupert, Vt.; G. W. Pierce, Brattleboro, Vt.; F. P. Knowles, Worcester; D. W. Field, Brockton; Henry B. Dean, Providence; Allen Money, Slocum, R. I.; Lloyd P. Ayer, North Franklin, Ct.; R. G. Waterous, Williamantic, Ct.

All were re-elections excepting H. S. Cheney, who takes the place of Prof. Hayward, Mt. Harmon, who has removed to Wilmington, Del., and Allen Money, who takes the place of B. B. Knight as a vice-president in Rhode Island.

On motion of B. W. Potter it was voted to have printed in pamphlet

form the by-laws and list of officers and members with their postoffice addresses and to supply each member with a copy.

J. B. Marcou, Princeton, opened a discussion on milk standards and pure milk and brought out that the standard set by Massachusetts law, is an impossible standard with Holsteins, and doubts if any more milk can be produced by over-doing the bathing of cows and the whitewashing of stables.

J. Louis Ellsworth, secretary of the Massachusetts Board of Agriculture spoke on the work of the club and is glad the breeding of Holstein cattle is going on in broad and intelligent way.

R. G. Waterous spoke briefly in favor of the breeding of Holsteins for size and not so much for butterfat, as the more vigorous animals produces a milk of more vitality.

B. W. Potter started an animated discussion by a friendly criticism of the president's address in which Mr. Potter did not agree with Gen. Wood in believing in trying to lower the standard. He thinks Holstein breeders should try to improve the standard of Holstein milk so that they can make cheese, butter and cream equal to Holland, and Holland does not do it on 2 per cent. milk. City people will not be satisfied with a low standard of milk and even the president of the club keeps some Jerseys to bring his milk up to the standard and supply the demand for the highest standard milk.

F. F. Field, of Brockton, gave some experiences as a milk pedler in his early days, and emphasized the idea that the average consumer doesn't know much about butterfat in milk and wants color.

Gen. Wood says it is the duty of Holstein breeders to dispel the fake notion that color makes good milk, that 4 per cent. milk is better than 3 per cent. When people realize that Holstein milk is more healthful and nutritious then people will cease to clamor for color and impossible standards. Gen. Wood says that cheese is made in Holland on 3 per cent. Holstein milk. The Massachusetts standard is too high; Holsteins can't produce 4 per cent. milk.

C. M. GRIFFIN

Charleston - - - Illinois

Breeder of

High-Grade O. I. C's.

Some fine gilts five to twelve months old, bred or open. Young boars ready for service. The finest lot of fall pigs that ever happened. Let me hear from you. I will please you. Reasonable prices.

Best in Years: Poland Chinas

Ohio Sunshine 2nd, yearling boar. Goot one March and Apr 1 boars sired by O. S. 2nd, Standard Sunshine and Correction. March gilts by O. S. 2nd. All bred s w s later. Registered Rams, large, smooth, heavy shearing. Write for prices, description and breeding to

W. H. CRESWELL CEDARVILLE, O.

CHESTER WHITES AND POLAND-CHINAS.

20 choice Spring Sows, open; 25 Fall Pigs, both sexes, and also some very fine yearling bred sows that are extra fine and were prize winners last fall. 12 head Poland-China from 3 to 12 months old. I never had a better offering in young sows than this.

C. R. CRESSMAN, Bursonville, Bucks Co., Pa.

OAKDALE FARM

Property H. A. DANIELS
313 - - - Ohio, Mich

Exceptional advantages to introduce our LINCOLN SHEEP CHESTER WHITES } to readers of SCOTCH COLLIES } this paper

Write your wants immediately. Special offering Scotch Collies and Chester Whites now on hand.

Chester Whites

I have them combining the best blood in Chester County. If you want the good old Chester that has made this county famous, we have them here that will please you. We breed and sell on y the best. Write me

L. WEBSTER, - Kelton, Pa.

Directory of Breeders' Associations

The following list comprises the name of every live stock breeders' association in the United States, of which we have record. The name and address of secretary will also be found in every case. If any associations of this kind are not listed, we ask that secretaries notify us at once, and also notify us at once as to any change in names and addresses. It will be the intention to keep this list up to date, and we ask for the co-operation of secretaries to that end.

Cattle Breeders.

American Aberdeen-Angus Breeders' Association—Thomas McFarlane, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Branch Association of the North Holland Herd Book—N. F. Sluiter, Brooklyn, N. Y., Secretary.
American Devon Cattle Club—L. P. Sisson, Newark, O., Secretary.
American Galloway Breeders' Association—Chas. Gray, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Guernsey Cattle Club—W. H. Caldwell, Peterboro, N. H., Secretary.
American Hereford Breeders' Association—C. R. Thomas, Stock Yards, Kansas City, Mo., Secretary.
American Jersey Cattle Club—J. J. Hemingway, New York, Secretary.
American Polled Durham Breeders' Association—Fletcher S. Hines, Indianapolis, Ind., Secretary.
American Short-Horn Breeders' Association—John W. Groves, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Sussex Breeders' Association—Overton Lea, Nashville, Tenn., Secretary.
Ayrshire Breeders' Association—C. M. Winslow, Brandon, Vt., Secretary.
Breeders' Association of French-Canadian Cattle of the United States—W. J. McMurdy, Binghamton, N. Y., Secretary.
Brown Swiss Cattle Breeders' Association—N. S. Fish, Groton, Conn., Secretary.
Dutch Belted Cattle Association of America—H. B. Richards, Easton, Pa., Secretary.
Holstein-Friesian Association of America—F. L. Houghton, Brattleboro, Vt., Secretary.
Maine State Jersey Cattle Association—N. R. Pike, Winthrop, Maine, Secretary.
National Polled Hereford Breeders' Association—A. E. White, Chicago, Secretary, 5629 Madison ave.
Red Polled Cattle Club of America (Incorporated)—Harley A. Martin, Gotham, Wisconsin, Secretary.
Shelby County Fine Stock Exchange, Harlan, Iowa, L. H. Packard, Sec'y.

Horse Breeders.

American Association of Importers and Breeders of Belgian Draft Horses—J. D. Connor, Jr., Wabash, Indiana, Secretary.
American Breeders' Association of Jacks and Jennets—J. W. Jones, Columbia, Tenn., Secretary.
American Clydesdale Association—R. B. Ogilvie, Union Stock Yards, Chicago, Secretary.
Percheron Society of America—Geo. W. Stubbins, Union Stock Yards, Chicago, Secretary.
American Saddle Horse Breeders' Association—I. B. Nall, Louisville, Ky., Secretary.
American Shetland Pony Club—Mortimer Leveing, Lafayette, Indiana, Secretary.
American Shire Horse Breeders' Association—Charles Burgess, Wenona, Ill., Secretary.
American Stud Book (Thoroughbreds)—James E. Wheeler, N. Y., Registrar.
American Trotting Register Co.—W. H. Knight, Chicago, Secretary.
American Suffolk Horse Association—Alexander Galbraith, Janesville, Wis., Secretary.
Cleveland Bay Society of America—R. P. Stricker, West Orange, N. J., Secretary.
French Coach Horse Society of America—Duncan E. Willett, 2112 Michigan ave., Chicago, Secretary.
German Hanoverian and Oldenburg Coach Horse Breeders' Association—J. C. Crouch, Lafayette, Ind., Secretary.
Morgan Horse Register—Joseph Battel, Middlebury, Vt., Editor.
National French Draft Horse Association—C. E. Stubbs, Fairfield, Iowa, Secretary.

American Angora Goat Breeders' Association—John W. Fulton, Kansas City, Mo., Secretary.
American Cheviot Sheep Society—F. E. Dawley, Fayetteville, N. Y., Secretary.
American Cotswold Association—Frank W. Harding, Waukesha, Wis., Secretary.
American Leicester Breeders' Association—A. J. Temple, Cameron, Ill., Secretary.
American Milch Goat Record Association—W. A. Shafor, Hamilton, O., Secretary.
American Oxford Down Association—W. A. Shafor, Hamilton, O., Secretary.
American Rambouillet Sheep-Breeders' Association—Dwight Lincoln, Milford Center, O., Secretary.
American Shropshire Registry Association—Mortimer Leveing, Lafayette, Ind., Secretary.
American Southdown Breeders' Association—Frank S. Springer, Springfield, Ill., Secretary.
American Suffolk Flock Registry Association—George W. Franklin, Des Moines, Iowa, Secretary.
American Tunis Sheep-Breeders' Association—Charles Roundtree, Crawfordville, Ind., Secretary.
Black-Top Spanish Merino Sheep-Breeders' Publishing Association—R. P. Berry, Clokey, Pa., Secretary.
Continental Dorset Club—Joseph E. Wing, Mechanicsburg, O., Secretary.
Dorset Horn Breeders' Association of America—M. A. Cooper, Washington, Pa., Secretary.
Franco-American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.

Swine Breeders.

American Berkshire Association—Frank S. Springer, Springfield, Ill., Secretary.
American Duroc-Jersey Swine Breeders' Association—S. E. Morton, Camden, O., Secretary.
American Essex Association—F. M. Stout, McLean, Ill., Secretary.
American Poland-China Record Co.—W. M. McFadden, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Tamworth Swine Record Association—E. N. Ball, Hamburg, Mich., Secretary.
American Hampshire (Thin-Rind) Swine Record Association—E. C. Stone, Armstrong, Ill., Secretary.
American Yorkshire Club—H. G. Krum, White Bear Lake, Minn., Secretary.
National Poland-China Record Co.—A. M. Brown, Winchester, Ind., Secretary.
International Record Association Co.—H. A. Jones, Penn Yan, N. Y., Secretary.
International for all breeds and countries.
Cheshire Swine Breeders' Association—Ed. S. Hill, Peruville, N. Y., Secretary.
Improved Small Yorkshire Club of America—F. B. Stewart, Espeyville, Pa., Secretary.
National Berkshire Record Association—E. K. Morris, Indianapolis, Ind., Secretary.
National Chester White Record Association—Thomas Sharpless, West Chester, Pa., Secretary.
National Duroc-Jersey Record Association—H. C. Sheldon, 604 Main St., Peoria, Illinois, Secretary.
O. I. C. Swine Breeders' Association—C. M. Hiles, Cleveland, O., Secretary.
Southwestern Poland-China Record Association—H. P. Wilson, Gadsden, Tenn., Secretary.
Standard Chester White Record Association—W. H. Morris, Indianapolis, Ind., Secretary.
Standard Poland-China Record Co.—George F. Woodworth, Maryville, Mo., Secretary.
United States Small Yorkshire Association—D. T. Bascom, California, Mich., Secretary.
Victoria Swine-Breeders' Association—H. Davis, Dyer, Ind., Secretary.
American Chester White Record Association—Earnest Freigau, Dayton, Ohio, Secretary.

FOR SALE—SHORT-HORN BULL CALVES

Chester White Pigs of Various ages One or two fine Boar that should please anyone.
JOS. T. FLEMING, Belleville, Pa.

ENON HERD CHESTER WHITES
Have some extra choice Fall pigs, both sexes. If you are looking for good Fall pigs, write me: **Barned Plymouth Rocks**, best strains. Birds for sale. Eggs in season.
D. W. SNELLBARGER, ENON, OHIO

TO CHESTER WHITE BREEDERS.

I offer my 2-year-old boar, recorded as Derry Boy 12239. He has a short, broad head, eye large and full, a very small ear that breaks nicely, a broad strong back, with well sprung ribs, good shoulders and heavy hams, strong bone and good feet. A smooth, growthy hog, very vigorous and a sire of large, even litters. I cannot use him to advantage any longer and he is for sale. Any breeder wanting a hog that has proved a good sire should come and see him or write at once. I have a lot of good May and June Boars and Sows that you should see. Are worth all you will pay for them. Write me.
J. H. YARNALL, Kelton, Pa.

Bargains in Poland-Chinas, Berkshires & Chester Whites

I now have a large stock of probably the best I ever owned. I cannot tell you all here, but I have Boars and Sows, all breeds, to 6 months old, mated not sired, and ready for service. Guernsey Calves and Registered Scotch Collie Puppies. Write for prices and regular. This stock must go and will be sold. M. B. Turkey, Barred and White P Rocks, Brown Lechors for sale.
P. F. HAMILTON, Cochranville, Pa.

Hemlock, N. Y., Secretary.
Hampshire Down Breeders' Association of America—C. A. Tyler, Nottawa, Mich., Secretary.
The International Lincoln Society—H. A. Daniels, Clio, Michigan, Sec'y.
Improved Black-Top Delaine Merino Sheep-Breeders' Association—O. M. Robertson, Eaton Rapids, Mich., Secretary.
Improved Delaine Merino Sheep-Breeders' Association—George A. Henry, Bellefontaine, O., Secretary.
International Delaine Merino Sheep Record—U. C. Brouse, Kendallville, Ind., Secretary.
International von Homeyer Rambouillet Club—E. M. Moore, Orchard Lake, Mich., Secretary.
Interstate and International Polled Dickinson Register—H. G. McDowell, Canton, O., Secretary.
Michigan Merino Sheep Breeders' Association—E. N. Ball, Hamburg, Mich., Secretary.
National Delaine Merino Sheep-Breeders' Association—John B. McClelland, Cannonsburg, Pa., Secretary.
National Lincoln Sheep-Breeders' Association—Bert Smith, Charlotte, Mich., Secretary.
National Merino Sheep Registry Association—R. O. Logan, California, Mich., Secretary.
National Shropshire Record Association—S. J. Weber, Middleville, Mich.
New York State American Merino Sheep-Breeders' Association—J. Horatio Earl, Skaneateles, N. Y., Secretary.
Standard American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.
Standard Delaine Spanish Merino Sheep-Breeders' Association—S. M. Cleaver, West Brownsville, Pa., Secretary.
United States Merino Sheep Registry Association—J. A. B. Walker, Mount Air, Pa., Secretary.
Vermont Merino Sheep-Breeders' Association—C. A. Chapman, Ferrisburg, Vt., Secretary.

Swine Breeders.

American Berkshire Association—Frank S. Springer, Springfield, Ill., Secretary.
American Duroc-Jersey Swine Breeders' Association—S. E. Morton, Camden, O., Secretary.
American Essex Association—F. M. Stout, McLean, Ill., Secretary.
American Poland-China Record Co.—W. M. McFadden, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Tamworth Swine Record Association—E. N. Ball, Hamburg, Mich., Secretary.
American Hampshire (Thin-Rind) Swine Record Association—E. C. Stone, Armstrong, Ill., Secretary.
American Yorkshire Club—H. G. Krum, White Bear Lake, Minn., Secretary.
National Poland-China Record Co.—A. M. Brown, Winchester, Ind., Secretary.
International Record Association Co.—H. A. Jones, Penn Yan, N. Y., Secretary.
International for all breeds and countries.
Cheshire Swine Breeders' Association—Ed. S. Hill, Peruville, N. Y., Secretary.
Improved Small Yorkshire Club of America—F. B. Stewart, Espeyville, Pa., Secretary.
National Berkshire Record Association—E. K. Morris, Indianapolis, Ind., Secretary.
National Chester White Record Association—Thomas Sharpless, West Chester, Pa., Secretary.
National Duroc-Jersey Record Association—H. C. Sheldon, 604 Main St., Peoria, Illinois, Secretary.
O. I. C. Swine Breeders' Association—C. M. Hiles, Cleveland, O., Secretary.
Southwestern Poland-China Record Association—H. P. Wilson, Gadsden, Tenn., Secretary.
Standard Chester White Record Association—W. H. Morris, Indianapolis, Ind., Secretary.
Standard Poland-China Record Co.—George F. Woodworth, Maryville, Mo., Secretary.
United States Small Yorkshire Association—D. T. Bascom, California, Mich., Secretary.
Victoria Swine-Breeders' Association—H. Davis, Dyer, Ind., Secretary.
American Chester White Record Association—Earnest Freigau, Dayton, Ohio, Secretary.



It's on the Square

INTERNATIONAL CONSOLIDATED RECORDS,

Comprising All or Any of the RECOGNIZED BREEDS

or
HORSES, CATTLE, SHEEP, SWINE, Land and Water FOULS, Angora Goats, Dogs and Pet Stock.

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FOUNDATION STOCK SUPPLIED

from Representative Herds Prices in keeping with Quality.

Manufacturers' International

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Tattoo Inks and Dies, Personal

Property Marking and REGISTRY DEVICE

The Only Impregnable System for ABSOLUTE IDENTIFICATION

of All Animals or Personal Property.

Organized 1900.

I. C. R. A.

Present Post Office address.

Please specify R. D. No. if you have one, in order that our list may be revised to date.

IMPORTANT

Sign this proxy and return at once to Herbert A. Jones, Secretary, Penn Yan, N. Y., immediately, in order that a good full vote may be registered. This is only proxy for 1907.

Business of great importance. All proxies must be filed at the office of the Association. No good if you are present.

ORGANIZED 1900
RECORDERS OF PURE
CLASSIFIED BREEDS
HIGHEST STANDARD OF EXCELLENCE
HOME OFFICE, PENN. YAN, N. Y.

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Two good reliable men in each county of the United States to devote one to three months each year to our business.
A STRAIGHT BUSINESS PROPOSITION—The only one of its kind in existence. We register all kinds of animals.

LOWEST FEES

BEST SERVICE

Our fare and expenses will be allowed the right parties coming here to investigate our business and receive instructions when satisfactory arrangements have been made. Write us fully stating your present occupation and experience with live stock. ADDRESS

International Consolidated Record Association
Penn Yan, New York

NOTICE OF ANNUAL MEETING

The Annual Meeting of the members of the International Consolidated Record Association, of Himrods, N. Y., U. S. A., will be held at the Head Office of the Association, Rooms 7 and 9, Lown Block, Main Street, Penn Yan, N. Y., U. S. A., on the 15th day of January, 1907, at ten o'clock in the forenoon, for the purpose of electing directors in the place of Hyllard Stirtzinger, J. H. Patrick and I. M. Fisher. (Two for five years and one for three years respectively) whose term of office expire on that day; and two inspectors of Election to serve at the next annual meeting, and for the transaction of such other business as may properly come before said meeting. Polls will remain open One Hour Only. Transfer books will be closed at noon, January 14, 1907, and open at noon, January 16, 1906.

Members desiring to be represented by proxy at this meeting must file their proxy with the Secretary before the meeting and should be sent by mail not later than January 12, 1907.

Directors' meeting is called for three o'clock P. M. at the office, same place. All directors and alternates named in printed list of Organization who can be present are requested to do so.

Should any director be unable to attend, he should immediately notify his alternate nearest our office and request said alternate to attend, then fill his name in proxy place of one printed, send proxy to the Secretary and on his receipt of same will at once notify alternate named therein also. Give such private instruction as you are entitled to do to your alternate.

Directors have always been given voucher for Registry Fees to the amount of their Expense Voucher and two dollars per day coming and return. This is applicable to alternates when attending for director.

Alternates receive Voucher for Registry Fees of \$5.00 good for one year only, when attending any annual meeting.

Dated November 15, 1906.

OFFICIAL PROXY

(Authorized by Article 1, Section 3 of By-Laws.)

KNOW ALL MEN BY THESE PRESENTS, That I, _____ do hereby constitute and appoint J. Elmer Platman to

be my lawful attorney, substitute and Proxy for me and in my name to vote upon all

the _____ shares held by me in International Consolidated Record Association, at the annual meeting of members of such association, to be held on the 15th day of January, 1907, at ten o'clock in the forenoon, at the head office of the Association, Penn Yan, N. Y., and at any adjourned meeting thereof, as fully and with the same effect as I might or could do were I personally present at such meeting; and I do hereby revoke proxy or proxies heretofore given by me to any person or persons whatsoever.

In witness whereof, I have hereunto set my hand and seal this _____ day of _____, 1907.

In presence of _____ (L. S.)

Present Post Office address _____

Please specify R. D. No. if you have one, in order that our list may be revised to date.

IMPORTANT

Sign this proxy and return at once to Herbert A. Jones, Secretary, Penn Yan, N. Y., immediately, in order that a good full vote may be registered. This is only proxy for 1907.

Business of great importance. All proxies must be filed at the office of the Association. No good if you are present.

The Co-operative Cowmaking Association

R. M. Washburn, Missouri State Dairy Commissioner, writes: "I am going into the dairy business, and I want to start with the grades of some of the dairy breeds; where can I pick up twenty or twenty-five Holstein or Jersey grades?"

This question is frequently coming to me, and I am always sorry, when it comes, there are not a few places in Missouri where the dairy-cow is bred numerously enough so that a carload of grades could be picked up in a neighborhood.

In this State we have several co-operative creameries. They are doing well as creameries, so well that I am firmly convinced that no centralized creamery can ever injure them. Upon inquiry at these places I find that the cows are greatly mixed, one farmer breeding Jerseys, another breeding Jerseys, and yet another Guernseys or Brown Swiss, and

A Mark here means that this paper is sent you as a sample copy. Please look it over carefully. It will keep you fully posted on the markets and what the Live Stock Associations are doing. Then "With the Business Man" and "Things to Think About" are valuable and not found in any other paper.

No other farm paper will contain so much valuable information as Blooded Stock during 1907. You cannot afford to miss it. Send us your subscription and get the next issue.

SUBSCRIPTION RATES.

1. Fifty cents a year or three years for one dollar.
2. Send twenty-five cents cash and the names and addresses of ten of the best farmers in your section and get the paper for one year, or send fifty cents and the names and addresses of twenty-five farmers interested in good stock and get Blooded Stock for three years.
3. Send three new subscribers and one dollar and get Blooded Stock free for one year.
4. Send one dollar and the names and addresses of twenty-five farmers and get Blooded Stock for three years and your choice of the following list free for one year:
Farmers' Voice, Chicago, Ill.
Farm Journal, Philadelphia, Pa.
Successful Farming, Des Moines, Ia.
Ohio Farmer, Cleveland, Ohio.
Mich. Farmer, Detroit, Mich.
The Farmer, St. Paul, Minn.
Indiana Farmer, Indianapolis, Ind.
Agricultural Epitomist, Spencer, Ind.
Am. Swineherd, Chicago, Ill.
Western Swine Breeder, Lincoln, Neb.
Green's Fruit Grower, Rochester, N.Y.
Kimball's Dairy Farmer, Waterloo, Ia.
Reliable Poultry Journal, Quincy, Ill.
Poultry Success, Springfield, Ohio.
Am. Poultry Journal, Chicago, Ill.
Poultry Advocate, Syracuse, N.Y.
Farm Poultry, Boston, Mass.
Inland Poultry Journal, Indianapolis, Ind.
Poultry Tribune, Freeport, Ill.
Successful Poultry Journal, Chicago.
5. Send one dollar and twenty five cents and the names and addresses of twenty-five farmers interested in live stock and get Blooded Stock for three years and your choice of any of the following papers free for one year:
Hoard's Dairyman, Ft. Atkinson, Wis.
National Stockman, Pittsburg, Pa.
Am. Sheep Breeder, Chicago, Ill.
Western Fruit Grower, St. Joseph, Mo.
Rural New Yorker, New York, N.Y.
Kansas Farmer, Topeka, Kansas.
Wallace Farmer, Des Moines, Ia.
Practical Farmer, Phila., Pa.

See page 3 for subjects for 1907.

many working with the Shorthorn. Although there are very profitable animals in all these breeds, there would be yet more profit if an entire community would engage in the breeding of a single kind of cow, for then when a man asked where he could pick up twenty or thirty Jersey grades I could point out his town. If he wanted Holstein cows I could point out that town. The individual cows in each of these communities would not be any better because of there being many, but the prices the owners would be able to get for them would be materially increased by the fact that a sufficient number to start a herd could be picked up at one place.

In several communities I find local farmers' organizations, even where there is no co-operative creamery. Would it not be wise, wherever there is an organization which will hold the farmers together in their buying and selling interests, to start this breeding of one-breed business? If this were the case, one sire could be used throughout his natural life in one community, by exchanging him with the neighbors.

There are two communities now in the State taking hold of this matter; one is breeding Jerseys and the other Guernseys, and I will do all I can to encourage them and to find a profitable market for their produce.

Send us word if you wish sample copies to hand your friends at the Farmers' Club meeting or public sales.

During the month of August 700,000 pounds of canned beef left all export points in the United States, which compares with 5,048,533 pounds during the corresponding month a year ago. Since the beginning of the year up to the end of August the total exports amounted to 29,516,905 pounds, as compared with 48,681,609 pounds during the same months last year. This is said to be the effect of the exposures of the unsanitary condition of packing houses.

JERSEY RED PIGS FOR SALE

"Meal Time"

I am offering for sale some choice young Jersey Red Pigs, and will be pleased to quote prices on anything you want, from a single pig to as many as you need. While my stock is of a superior quality my price is low enough to make it a profitable investment for every customer who buys. A guarantee of safe arrival in good condition goes with every animal shipped and my reputation is back of every transaction. I honestly believe that I am offering the best value for the money in this country. My celebrated pure "Jersey Red Pigs" are growing in favor every day, they are money makers. They are small-boned, vigorous, prolific, and easy to raise. Get a pair of these pigs and watch your wealth increase. Every "Jersey Red" sow is a gold bond—her litters are the coupons which you convert into cash. Write today—tell me what you need, I will tell you what I have.

ARTHUR J. COLLINS,

Box A,

Moorestown, N. J.

BLOODED STOCK for December.

It's Nerves

That make life worth living—when they are all right. But when weak or exhausted it's different; some of the organs do not get enough energy. Their action becomes weak. The penalty is aches, pains and misery. Dr. Miles' Nervine restores nervous energy. It establishes normal activity, so that nature can correct the irregularities.

"Dr. Miles' Nervine has completely cured me of nervousness and indigestion. I suffered untold misery for months. The first half bottle of Dr. Miles' Nervine relieved me. I have used 7 bottles in all, and now I feel as well as ever, eat heartily, digestion good, nerves strong, sleep well."

MRS. MOLLIE FLENNOR.

Campbell, Texas.

If first bottle fails to benefit, money back.

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Farmer's Sons WANTED with knowledge of farm stock and fair education to work in an office. \$50 a month with advancement, steady employment, must be honest and reliable. Branch offices of the association are being established in each state. Apply at once, giving full particulars. The VETERINARY SCIENCE ASSOCIATION, Dept. 12, London, Canada

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The Disinfectant Dip That is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not burn the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurf, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For pigs, cattle, sheep, horses, poultry and dogs. One bottle will cure it all.

Send For Free Book

We cure all bugs and other troublesome insects. If you desire more details keep Car-Sui. We will send you a booklet and a sample of the dip as direct.

Total price \$1.00, express paid. 1 gallon size \$1.50, freight paid.

Moore Chemical & Mfg. Co.

1501 Broadway St., Kansas City, Mo.

Vol. XII

JANUARY 1907

LIBRARY No. 11

RECEIVED

JAN 22 1907

U. S. Department of Agriculture

50c A YEAR
3 YEARS \$1.00

BLOODED STOCK

Does it Pay to Buy Feed at Present Prices

IN answering this question, as the hog-killing time is near at hand, I will try and get at the cost of raising a pig from weaning, say, at two months old, farrowed March 1, and killed December, when from nine to ten months old.

I choose March 1st for birth, and the spring, summer and fall for raising to maturity; as during that period it can be done at least cost, as the hog has the grazing until frost comes, and then the run after the acorns, chestnuts and other fruits of the forest, before being penned for four to six weeks, as the final preparation for the butcher.

In getting cost of raising this experimental hog, I shall have to use grain and shall fix on millfeed, corn meal and corn. In order to be on the safe side in prices, I shall value millfeed at \$1.25 per 100 lbs., or 1.25 cents per pound; corn meal, 75 cents per bushel, or 1½ cents per pound; corn, 50 cents per bushel of 56 pounds. From two to six months old the pig will be fed a mixture of two-thirds millfeed and one-third corn meal, afterwards whole corn will be used, and finally, on being penned, two-thirds to one-third millfeed will be the ration used.

To simplify matters, however, in working out my figures, I shall use the two-thirds millfeed and one-third corn meal mixture only.

I shall now refer to that wonderful production in farm literature, Feeds and Feeding, by Professor Henry, a book that should be in the hands of every farmer and stock raiser, and the new reader will wonder why he has not been in possession of the work years ago.

The information it contains is invaluable, and the summary and results of experiments at the various Agricultural Stations is stated briefly and plainly so that everybody can understand.

At eight weeks old, a pig should weigh about 28 pounds (page 540). At from 15 to 50 pounds in weight it takes 293 pounds of grain to make 100 pounds gain in a pig, and 498 pounds of grain to make same gain in one growing from 200 to 250 pounds in weight.

The average grain required to make 100 pounds gain, from 15 to 50 pounds, to 200 to 250 pounds in a pig is 422 pounds. Therefore, to make my pig weigh 250 pounds at 422 pounds grain per 100 pounds, will require 1,055 pounds of grain feed. The cost will be as follows:

1-3 corn meal, 350 lbs., at 1½ cents per pound.....\$5.25
2-3 millfeed, 705 lbs., at 1¼ cents per pound..... 8.80

A 250-pound pig costing \$14.50, equals 5.8 cents, or nearly 5 3-5 cents per pound. This, of course, means being raised exclusively on grain, and at retail store prices of to-day.

I shall have some deductions to make: The amount of green forage eaten by pigs in good pasture is about sufficient for their support. At the Utah Experiment Sta-

tion, four years' trial of pigs confined in small pens required 92 pounds more grain to make 100 pounds gain than pigs allowed exercise and run of pastures. (Page 549) My pig has had plenty of exercise and the best of feeding in pasture and forest, so I can safely make a reduction in the cost of feeding of 92 pounds per 100 pounds. My pig weighs, namely, 250 pounds, which will be 230 pounds of grain at 1.33 per pound, making \$3.05.

In addition to this Prof. Henry values fertilizing constituents in the form of nitrogen, phosphoric acid and potash, in one ton of wheat bran at \$13.48 per ton, and in the same weight of corn at \$6.74.

I will be conservative and value fertilizing constituents in 2,000 pounds millfeed at \$10, and corn at \$6 per ton. 700 pounds millfeed pig consumed will contain fertilizing constituents valued at \$3.50 pounds corn meal at \$1.05. I shall therefore have a second deduction to make from original cost of feed of \$4.45. Let us now sum up:

Cost of 250-lb. pig, all grain.....\$14.05
Less feed from pasture and forest.....\$3.05
Less fertilizing constituents contained in food consumed.....4.55..... 760

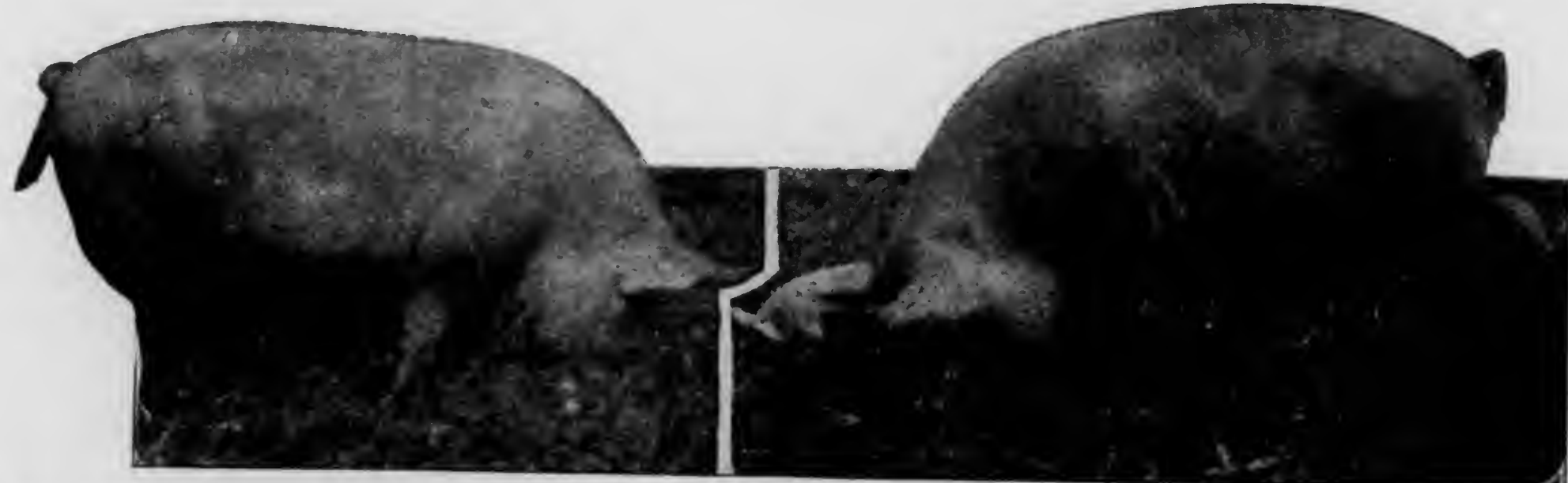
Now, let me see what my pig has actually cost me. 250 pounds costing \$6.45 equals 2.58 cents per pound, or \$2.58 per 100 pounds. The American Swineherd, October 1, 1906, in its report of Chicago hog market, quotes average price of hogs on that day at \$6.47½.

I am not, in this article, going into the question of interest on capital, labor, etc., but net actual cost of feed given the pig only.—Robert Hibbert in Southern Planter.

Every breeder who has made a study of the art of breeding has found volumes written on heredity and atavism and selection. They have been struck with the frequency of the aphorism that like produces like, and have been puzzled at the numerous exceptions to the universally accepted rule. The exceptions are usually charged to atavism or breeding back, and they let it go at that. Heredity is a factor that can never be lost sight of. Its power for good or evil is universally recognized, and that we may turn its tendencies to good to our advantage we have devised stock records galore and preached the power of controlling the type and quality of our coming produce by careful selection of males and females of the type we desire to produce, and made the lines of ancestors appearing in the pedigrees of record a basis of hope.

It must be confessed that the exception to the rule of like produces like are so many and in general so unaccountable to the average breeder that he is mystified, and often discouraged.

Some Great Yorkshires For Sale



Dalmeny Lady Frost, No 7980, A. Y. R. Bred by Earl of Rosebury, of Scotland. This sow weighs about 900 lbs. Was a noted prize winner in England and Canada. 2 1-2 years old, and "Aldoro Clara," No. 7986, A. Y. R., bred by J. E. Buthous, of Ontario, Canada, is 2 1-2 years old and would easily carry 900 lbs. We consider her well high perfect. A superior brood sow. These are two of the great brood sows in this herd. We can sell you superior animals. Also Guernsey Cattle. Come and see us.

ALDORO FARM,

ROSSTON, PA.

BLOODED STOCK JANUARY 1907

FOR PRACTICAL STOCK BREEDERS AND FEEDERS.

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One Year 50 Cents
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Samples on Application.

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Dr. H. L. Patterson, President.

C. E. Morrison, Secretary and Treasurer.

THE BUSINESS END

A MARK here means that this paper is sent you as a sample copy. Please look it over carefully. It will keep you fully posted on the markets and what the Live Stock Associations are doing. Then "With the Business Man" and "Things to Think About" are valuable and not found in any other paper.

No other farm paper will contain so much valuable information as Blooded Stock during 1907. You cannot afford to miss it. Send us your subscription and get the next issue.

SUBSCRIPTION RATES.

1. Fifty cents a year or three years for one dollar.

2. Send twenty-five cents cash and the names and addresses of ten of the best farmers in your section and get the paper for one year, or send fifty cents and the names and addresses of twenty-five farmers interested in good stock and get Blooded Stock for three years.

3. Send three new subscribers and one dollar and get Blooded Stock free for one year.

4. Send one dollar and the names and addresses of twenty-five farmers and get Blooded Stock for three years and any one of the following list free for one year:

Farmers' Voice, Chicago, Ill.
Farm Journal, Philadelphia, Pa.
Successful Farming, Des Moines, Ia.
Ohio Farmer, Cleveland, Ohio.
Mich. Farmer, Detroit, Mich.
The Farmer, St. Paul, Minn.
Indiana Farmer, Indianapolis, Ind.
Agricultural Epitomist, Spencer, Ind.
Am. Swineherd, Chicago, Ill.
Western Swine Breeder, Lincoln, Neb.
Green's Fruit Grower, Rochester, N.Y.
Kimball's Dairy Farmer, Waterloo, Ia.

Reliable Poultry Journal, Quincy, Ill.
Poultry Success, Springfield, Ohio.
Am. Poultry Journal, Chicago, Ill.
Poultry Advocate, Syracuse, N. Y.
Farm Poultry, Boston, Mass.
Inland Poultry Journal, Indianapolis, Ind.

Poultry Tribune, Freeport, Ill.
Successful Poultry Journal, Chicago, Ill.

5. Send one dollar and twenty-five cents and the names and addresses of twenty-five farmers interested in live stock and get Blooded Stock for three years and your choice of any one of the following papers free for one year:
Hoard's Dairyman, Ft. Atkinson, Wis.
National Stockman, Pittsburg, Pa.
Am. Sheep Breeder, Chicago, Ill.
Western Fruit Grower, St. Joseph, Mo.
Kansas Farmer, Topeka, Kansas.
Wallace Farmer, Des Moines, Ia.
Practical Farmer, Phila., Pa.
Prairie Farmer, Chicago, Ill.
Homestead, Des Moines, Iowa.

6. Send us one dollar and fifty cents and the names and addresses of twenty-five farmers interested in live stock and get Blooded Stock during the coming year. Some of the very best writers in the country will write for us on these subjects and the information in any number will be worth more than the whole year's subscription. You cannot afford to miss anything these writers say.

Breeders' Gazette, Chicago, Ill.
Country Gentleman, Albany, N. Y.
New England Homestead, Springfield, Rural New Yorker, New York.
Orange Judd Farmer, Chicago.
Am. Agriculturist, New York.

PROGRAM FOR 1907.

January—Milking Machines
What they are, their development and what they will do for the dairyman.

February—The Horse on the Farm
How to make the most out of him—combining work, profit and pleasure.

March—Farm Poultry
What to keep—how to care for—its place on the farm.

April—Silos and Ensilage
Cost of erecting—advantages to be gained—profit.

May—Separators on the Farm
The advantages to be gained and profit saved. What is required.

June—The Model Dairy Cow—Form and Purpose.
Breeds best adapted—How to select and what she should do.

July—Cow Barns
Illustrated—Showing plans and conveniences.

August—Goat Growing
What the industry is—requirements—returns.

Gasoline Engines—As a farm implement can be used in many ways.

September—Hog Houses
Plans illustrated—showing how and giving ideas.

October—Roofing for Farm Buildings
Cost—how applied—help necessary to put on.

November—Mule Breeding
The demand, supply and profit.
Sheep Growing and Feeding—How a few can be profitably kept by every farmer.

December—Beef Cattle Breeds
Selection—age to fatten—when to market.

We need your assistance to get your neighbor to see Blooded Stock and have him subscribe. He needs it badly and cannot afford to miss what will be said under our program for 1907. See him at once. Let us know and we will send you sample copies and pay you a liberal commission. Wont you help us?

A MARK here means that your subscription expires with this issue. We desire to call your attention to some of the subjects that will appear in Blooded Stock during the coming year. Some of the very best writers in the country will write for us on these subjects and the information in any number will be worth more than the whole year's subscription. You cannot afford to miss anything these writers say.

On this page you will find our subscription offers for the season. You can save money by using some of these offers. We want your renewal at once. Please attend to it so that there will not be any delay. We do not intend to send our paper to those who do not want it, so we wish a prompt reply to this notice.

We will be glad to have you distribute copies of Blooded Stock at Farmers' Institute Meetings, Public Sales, and among your friends. Write us when you wish them and we will gladly forward same. A liberal commission will be allowed to those who will take subscriptions for us.

This is the season of the year that our matters must be straightened out and plans arranged for another year. Many thousands of subscriptions expire at this time and it will be a great assistance if subscribers will promptly send in their renewals. We do not think we are asking too much in requesting the hearty co-operation in sending in your own renewal, and in trying to send us one or more new subscribers. We have endeavored to give only the best advice and allow no deceptive advertisements in our columns.

We do not claim to be infallible, but we have a true interest in the welfare of our subscribers. It has been our object to have only such things appear in our columns as would be safe and profitable to any one. We want our readers to have confidence in our paper and our advertisers. If you have a neighbor who is trying to progress tell him to try Blooded Stock for a year. That he will be benefited by what he learns by reading it. We will try and merit the confidence placed in us.

Always mention Blooded Stock when writing advertisers.

Things to Think About

This Page Open to Any One Having Ideas to Discuss.

NOW IS THE TIME for you to hunt up all the data you can secure and figure out the saving of time, labor and expense that would be to you by having a Manure Spreader. These machines are not only a money saver but a money maker, as the manure will go at least a third further and the work will be better done than is possible by the old way. You run no risk in purchasing because they are advertised in this paper and sent on thirty days' trial. Write the manufacturers at once.

NOW IS THE TIME to have that unruly cow dehorned. One vicious animal in a herd does an immense amount of harm. We have seen times when a man would save money by shooting such an animal, but in these days this is unnecessary. Every farmer should keep a Dehorner and have it ready for use when needed. They can be bought for a small sum and the investment is first class. Get one right away. You can get your money back by cutting the horns off your neighbors cattle.

NOW IS THE TIME for you to write to the manufacturers of cream separators and get all the information possible about the cost of installing a machine to suit your circumstances. Don't think that you cannot afford it. You cannot afford not to have one. The returns from your dairy will increase one-third with one of these machines and you will save time and labor in the bargain. Write the manufacturers at once. There are three machines advertised in this paper.

NOW IS THE TIME to consider the breeding of your mare. Our February issue will be devoted to this subject and it is our desire to have any of our readers write us how they breed their mares and do their farm work at the same time, telling what profit they derive in this way and give their experience on the subject. We trust that our readers who make this a source of profit will write us fully on the subject at once.

NOW IS THE TIME to send for the catalogues of Harvesting Machinery. Get these catalogues, study the improvements that each has made over last year's pattern. This will post you on the merits of various machines and better enable you to make a selection to suit your needs.

NOW IS THE TIME to see that your neighbors get Blooded Stock. He needs all the information that can be had and certainly he cannot get better advice than is found in Blooded Stock. Our program for 1907 is of great value to every farmer. See to it that he gets it. We will send you sample copies if you will write us.

AS A RESULT of experiments in dehorning milch cows at the Minnesota Experiment Station, nine cows produced seven per cent. less milk in three milkings following dehorning than they had given in the three previous milkings, and produced three per cent. less butter fat in the same period. Six cows which had been kept where they could see the excitement and smell the blood, lost three per cent. in their total butter-fat in the same time, showing that the slight loss of the dehorned cows was due partially to excitement.

AT THE TENNESSEE STATION, as a result of experiments in dehorning, sixteen cows were dehorned and in ten days they lost only 34.2 pounds of milk from a total previous ten days' yield of 2874.8 pounds.

DEHORNING EXPERIMENTS at the Georgia Experiment Station, nine cows made an actual gain in milk yield the day following dehorning.

THE NEW YORK STATION, at Cornell, in experiments in dehorning, found that five cows lost an average of a pound a day for four days following dehorning. Seven cows not dehorned lost an average of one-half pound a day in the same time. One of the dehorned cows lost an average of four pounds per day in the record time.

FOURTEEN COWS were dehorned at the North Dakota Experiment Station. Most of them fell off slightly in their milk, but gained in the per cent. of butter-fat, and at the fourth milking all were back to their normal flow. The fourteen cows made about one pound less in the two days following dehorning than they had made in the two previous days.

COMPARE the build of the race horse between the fore legs with that of the draft horse.

MILKING MACHINES.

WE are doubtless on the eve of as great or greater advance in the dairy industry as that which has marked its improvement in the adoption of cream separators. The milking machine, indeed, goes deeper into this problem than the separator does, for it is demonstrated already by their use that they secure absolutely pure milk, by avoiding contact of the milk with the air, dust and dirt of the dairy barn in milking. These machines now provide a quality of milk much higher and freer from bacteria than fixed by the hygiene and health rules requiring standard milk. With a wider knowledge of advantages of the milking machines we shall soon have both absolutely pure milk, and freedom from hand-milking drudgery which has deterred so many from going into the dairy business, and made labor shy in dairy work.

It should be said in this connection that the highly nervous organization of a dairy cow is rarely appreciated as it should be. Ignorance of the sensitiveness of her nature causes farmers producing milk for the market much annoyance and loss every year. This element of loss is caused principally by the shrinkage in the flow of milk resulting from harsh treatment or sudden change in condition or handling. Slight changes in feed or care easily manifest themselves, which will result in a contraction of all the milk glands where an expansion is desired.

In the natural process of removing the milk from the udder of the cow the conditions are in every way opposite to hand milking. Few people think of this when milking a cow though this may cause her to hold up her milk. The fault is not in the cow, but with the person doing the milking, who has in some way irritated the nerves that control the milk glands and thereby stopped the flow of milk. The expression that a cow "holds up" her milk, is therefore obviously erroneous, as more often it is caused by the milker, and not the cow.

When a calf sucks its mother it takes but a part from one quarter at a time, moving from one quarter to another a number of times at each meal. In hand milking two quarters are drawn at once, the contact with the teat being entirely different from the natural process, making it necessary for the man to "break the cow in," or better, to teach her to milk by hand, not only with her first calf, but often with subsequent freshening. People have become so accustomed to this "breaking in" process that they think little or nothing of it. It is a part of the routine of dairying, taking more or less time, according to the disposition of the cows.

In the designing of a machine for milking cows to take the place of the hand process, the manufacturers are obviously confronted with a difficult problem, very much resembling the one which puzzled the first man who attempted to get milk from the cow for his use. It undoubtedly discouraged him when he tried to imitate the calf, and after long thinking and laborious effort he succeeded in "breaking in" the cow, and in the hard task of educating himself to milk by hand. And even today, says the Indiana Farmer, no one can milk successfully by hand without several months of practice, and even then there is a wide difference in milkers, and far too many of them are and always will be poor hand milkers. So far is this true that the dairyman who wants to keep up the daily average of his cows avoids changing milkers as much as possible, for he knows that to change milkers will reduce

the flow of milk very materially. He also knows that it is extremely difficult to bring the cows back to the original quantity. Of course he anathemizes the milker, but, as is always the case, the anathema returns on his own head, his men have felt the injustice of the criticism, knowing that it was owing as much to the sensitive nature of the cow, as to their fault, and we find less and less men willing to undertake the job of milking, and endure the everlasting work twice a day with no change or let up. The most serious question confronting dairymen today is the question of good milkers. How many boys have left the farm on account of the milking? Bad stable conditions, unsanitary handling of milk, is the constant question of state and municipal legislation to correct. The source of milk supply when seen by consumers has often reduced sales. Milk is the only perfect feed, building up and restoring all parts of the body alike, and in these latter years this fact is better appreciated than ever before, but the quality and condition of the milk has checked consumption and held the price down. To mitigate the present evils in the production of pure milk the milking machine can do more than all other agencies combined, as a properly constructed machine doubles and quadruples a man's capacity to milk, and the milk itself is pure and clean.

Milk drawn with the machine will keep twice as long, and its bacteriological content is so low that practically all of the present trouble in handling pure milk is removed. Hence in the designing of a milking machine the following principles are laid down, and absolutely carried out in its construction. Natural processes are imitated as closely as human ingenuity can devise.

Machine milking is an artificial process, hence the cow must necessarily be "broken in" kindly, gently and deliberately. The process is artificial because all four quarters are simultaneously relieved, making it

necessary for four distinct bunches of nerves to operate at once, where nature had provided that but one set should operate at a time, because the glands in a cow must be called upon to secrete the milk in a fraction of the time nature had provided, and because the teat-cups, no matter of what material made, are entirely different from the mouth of a calf.

The apparatus as made when attached and ready for use has a soothing effect upon the nerves of the udder, and the method of attaching to the cow such as not only prevents the cow from kicking or moving about, but being in the least uneasy. Excessive suction is avoided. The attachment to the cow, or the teat-cups, fit all cows.

It is impossible to injure the teats or udder of the cow by the use of the apparatus as noted recently. The apparatus is constructed powerful enough to milk the hardest milker, and gentle enough so that it will not irritate the most sensitive or easiest milker.

The machine is quickly removed from one cow to another, and the teat-cups easily and quickly detached from the machine for cleansing.

All parts of the apparatus which come in contact with the milk are so constructed as that they can be easily and thoroughly cleaned without taking apart, for no matter how well made any machine is, an inexperienced person will often find difficulty in putting it back together in as

(Continued on Page 8)



A Novel Milking Machine Owned by Handy Wagon Co., Saginaw, Mich.

The Developement of the Milking Machine.

THE subject of the milking machine is the most interesting of all subjects in many localities these days. What the result of a thoroughly successful milking machine in general use might be it is hard to tell. It would seem that the use of such a machine might do much to eliminate many dairymen from the caprices of hired men. Whether, as some predict, the machine would have the effect of increasing milk production by encouraging the keeping of more cows, no one knows, but it seems probable, says H. H. Lyon in Hoard's Dairyman.

The thoughtful dairyman looks upon the outcome with no little concern. At the present time the coming of the successful milking machine appears probable. The use of machinery commonly results beneficially to the people in general.

It is now possible, for the first time, to illustrate the machine about which so much has been said during the last year and a half, the Burrell-Lawrence-Kennedy milking machine. Mr. Loomis Burrell, one of the younger members of the Burrell Company, with a number of trained mechanics and helpers worked on the problem, both from a practical working point, and from the results of other experimenters who have recorded their work in the Patent Office.

The Lawrence-Kennedy people were invited to come and see the results and add from their knowledge. The result of all this study, experimentation, and consultation has been remarkable. The out-Kennedy machine.

The operation of the machine is simple, which is a prime requisite. It is a power machine, and the power used may be any that is used upon the farm. Where electrical power can be had there is nothing better, for it is always ready. A gasoline engine would seem to be about the next most convenient source of power. A tread power or steam engine will answer. Even a steam boiler with an injector being used to exhaust air from a reservoir. A column of water where there is a sufficient quantity of running water, with a good head, may answer. Any method to exhaust half the air from a reservoir may be followed.

To install the machine there must be a system of piping. A line of pipes extends the length of each row of stanchions or stalls. At points between each two cows there is a branch pipe with a stop-cock. Connected with this system of piping is simply a cylinder of suitable size. A vacuum gauge and safety valve are attached to the cylinder. Only about half the air pressure is removed by the suction. In all of these cases, save where the injector or the water jet is used, there must be a vacuum pump, and the power is used to operate the pump. The pump or the injector being connected to vacuum tank, and through it, to the system of piping along the stanchions, the apparatus is ready for operation. The power is started and the vacuum in tank and piping is brought to the required pressure, which is about seven or eight pounds per square inch, instead of the usual atmospheric pressure of fifteen pounds. Or as expressed in vacuum apparatus, about fifteen inches. This means that the vacuum within the system is sufficient to sustain a column of fifteen inches instead of the usual atmospheric pressure of thirty inches, barometric pressure.

The milking pail with the mechanism on its cover is the part which has received the most attention. The pail is very strongly built, is cone shaped, smaller at the top than at the bottom. On the cover of the pail is the pulsator. The pulsator on the Burrell machine is moved by a diaphragm, which is in turn moved by the pressure of the air, and the change in pressure due to vacuum. The pulsator acting at a speed of about fifty-five pulsations per minute alternately turns on the pail the vacuum and full atmospheric pressure.

To operate the machine the attendant adjusts the cover

on the pail, sees that the stop cocks in the tubes leading from the pail to the teat-cups are closed. He sets the pail between the two cows to be milked, well up toward the front feet of the cow. He now attaches a piece of rubber hose leading from the pail to the spur pipe over the stanchions, and turns the stop cock in the spur. This turns the vacuum on the pail. The attendant then takes from a hook on the pail, a group of four teat-cups which are connected by a specially constructed rubber tube to the pail. He turns the four short tubes down so as to close them, and holds them with his fingers and thumb, turns on the vacuum by opening the stop cock on the pail, which he closed at the beginning. He now dextrously slips the cups on the teats, releasing his finger from each tube as the cup is in position. The cup is instantly drawn into position and the milking begins. The other set of cups are quickly adjusted to the cow that stands the other side of the pail.

As but little attention need be given to these two cows, the operator is free to take another pail and start milking two more cows, and he may repeat the operation with three, four, or more pails according to the speed with which he may be able to work. Generally three pails are about all that one man, unaided, can attend to. If aided by an assistant, five or six pails may be managed by an experienced man, that is, twelve cows at once. The machine does not milk a cow more rapidly than by hand milking, but several cows may be milked at a time. It will be seen that one experienced man can milk a large number of cows, and that if aided by a little inexperienced help, may manage a very large dairy. If the dairy be small two pails may be all that are required.

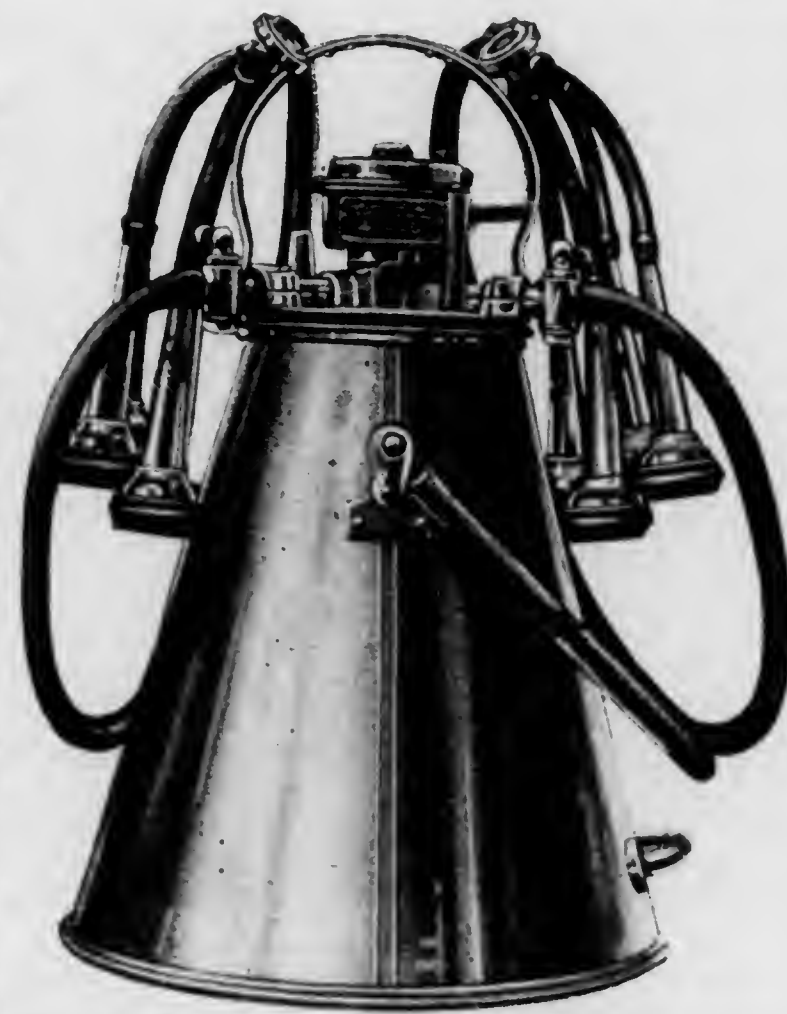
The operator may find it to his advantage to handle the udder of the cow somewhat, especially toward the last of the milking process. Some cows seem to need a little stripping after the machine has done its work, while others, I am told, do not need it. In the production of certified milk a few streams are taken by hand milking and rejected, before the machine is applied.

The serious question, after determining that the machine will milk cows, seems to be whether it can be kept clean. The fact that sterile milk has been produced by its use, speaks favorably, and the continued production of high-grade certified milk where the milking machine is in use goes to show that the machine may be kept in a thoroughly clean condition. As soon as the milking is

concluded and before the milk has had time to dry on any part of the apparatus the teat-cups are placed in cold water and the machine is started as in milking. The water is drawn through the apparatus, thus rinsing off the milk that may have adhered. Hot water would cook the milk on the cups and tubes if run through the machine at first. As soon as the milk has been removed, hot water is run through, and the machine carefully washed. Sal soda may be used to cut the fat out from the interior surfaces of the tubes.

The rubber tubes are specially constructed so as not to impart odor or taint to the milk, and will stand boiling water and steaming. It is recommended that a wooden tank be constructed long enough to hold the tubes and about six inches wide and deep. Brine is to be placed in the tank and the tubes and cups are to be kept in the brine while not in use. This keeps them sweet and free from bacteria and preserves the life of the rubber. The machine has been constructed with a view to cleanliness, but no doubt much of the success in actual practice would depend upon the care taken by the operator.

It is often asked how the cows seem to like the machine. I have seen it in actual use at three different places, and at each of these there was on the whole less restlessness among the cows than among others when



Burrell-Lawrence-Kennedy Milking Machine.

hand milked. Evidently the cows take very kindly to it. I should expect less trouble than from the average hired man when changing milkers, except at first, from the noise of the machine. There isn't very much noise, but the working of the pump and engine even at a little distance might disturb some cow at first, and the slight click of the pulsator might excite a nervous animal. This they would become accustomed to in a short time.

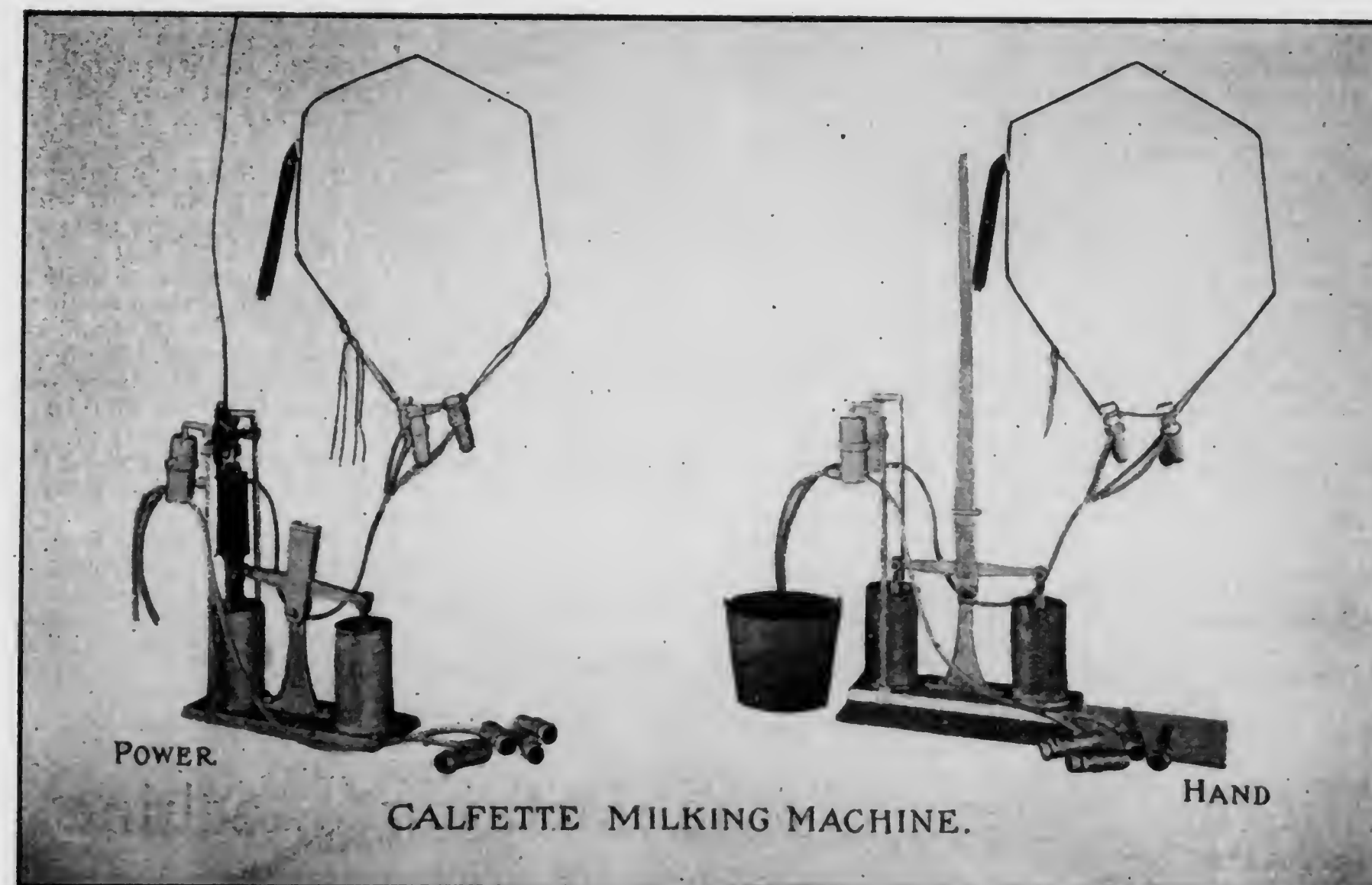
I may be a little prejudiced, but it seems to me that for a test to get the largest quantity of milk obtainable, I should prefer to have a milker like a very few people that I have seen, who appear to be experts. In case of an average milker, or frequent change of milkers, I believe the machine quite as good.

It is probable that there are people with so little mechanical ability, or so prone to do their work carelessly, that they could not handle the machine successfully. Most farmers, however, have sufficient experience with machinery to enable them to operate the milking machine successfully. In my own experience, I made a partial

failure in adjusting the teat cups the first time that I tried to do it. The next time, I put them on in pretty good shape, and am sure I would have no trouble in operating the machine.

The pulsator mentioned is a piece of mechanism difficult to describe but is for the purpose of producing the intermittent action as in the opening and shutting of hand milking. It is the apparatus that has called for the most inventive skill to perfect, and upon which rests the machine's successful operation.

The cost of installing one of these machines is considerable. The power may be a hundred dollars, and the pump well towards that sum. The piping, vacuum tank and necessary appliances would count up considerably. The pails with mechanism and tubing costs, I believe, \$75 each. I have seen an estimate of an outfit for 60 to 75 cows for about \$500 exclusive of the power. For a small dairy of fifteen to thirty cows, the cost might be considerably less. It would depend on how one is situated whether he could make it profitable to install an outfit



THE PRESENT STATUS OF MILKING MACHINES

DAIRYMEN in every locality have been looking for the last five years for a practical, efficient milking machine. There are those people who believe that the day of mechanical milking has not yet been reached, owing to the fact that cows cannot be successfully milked with a machine until they have been milked for some generations in this way. Indeed some go so far as to say that it will be necessary to have machine milked cows for several generations before mechanical milking is entirely practical. There is perhaps no dairy apparatus at the present time coming into such popular notice as milking machines.

Of the milking machines—all the five or six successful milking machines which have appeared in the last two or three years—most of them have approached the proposition of mechanical milking to imitate the working of a man's hand. So far as I am aware only one inventor has started out to imitate the suck of the calf. I am of the opinion that the nearer we keep to natural processes the better, and so we must admit that the only successful milker must eventually be built and embody such principles as are exemplified in the calf which takes milk from its mother. To my mind there are certain salient principles that should never be lost sight of in the construction of a successful milking machine. To make a machine that is so powerful in its suction that it will practically draw milk from an unwilling cow is a mistake, because eventually if the pumping is persisted in bloody milk will

be the result, or possibly a case of garget where cows have been forced to give down their milk.

The question of milking machines is a question of education, and until a man approaches the proposition in that way he will not meet with the degree of success that he should. The operator must thoroughly understand the organization and make-up of a cow, and the machine must be such in its operation that it will do the work gently, carefully, and its effect on the cow will be such that she will not be annoyed, worried, or even her attention attracted by the use of the machine after a few trials. There are other principles that should be constantly borne in mind with reference to a practical milking machine.

The first question is in reference to its cost to the user. It is true that a majority of dairymen are not in a position to put a large amount of money into a milking machine. It is simply a question of buying a machine for the purpose of cheapening production, or to save a little money over the present method of milking. Hence a machine that is simple in construction, easily repaired, and not at all difficult to clean is what the dairymen have been and are looking for throughout the entire country. The milking parts should be made of such material as to be impossible to contaminate the milk. The ideal machine should draw the milk from the udder into a closed can without its coming in contact with the open air, as it is becoming a well-known fact that milk drawn from the

(Continued on page 9)

good shape as an expert would, to say nothing of the time consumed in taking apart and assembling it.

All parts are so simple as to be inexpensive and readily taken apart and assembled, and made so durable that with good care they will last for a number of years without any part wearing out, as it is a recognized axiom that all farm machinery should be so simple that if repairs or new parts are needed a farmer can do the work

himself without the aid of a mechanic. All parts of the machine are made in duplicate so they can be easily replaced.

The small dairyman with 10 or 15 cows, or the large dairyman with 50 or more cows wants a practical machine, reducing the cost of production and enabling him to produce a better quality of milk which will bring a higher price.

THE MILKING MACHINE

A Western New York correspondent of Hoard's Dairyman writes of the many lately invented milking machines, as follows:

"The agricultural department of Cornell University has begun a systematic test of them as fast as it can get them. It is the survival of the cheapest which are at the same time capable of doing the work well. There is a big difference in them and I would advise the farmer and dairyman to look them well over before buying. He will find that they will do all the work, but the difference lies in ease of action and handling, with also a big difference in first cost. One sort, which seems to be in the lead here now, is not likely to last long, for it not only requires much power, but costs a matter of \$60 to start with.

The other one that I know much about, milks two cows at a time, with hand power that would work a pump handle and could be sold for \$10. It has also developed a new fact in milk, of which I may have written a word before, and that is that milk which is not liberated to the open air will not sour for quite a long time and is practically sterile, which is in one sense about the same thing.

I am not here to recommend this or that machine, but rather to do what I can to keep the cow owner posted on the machines that come under my notice. If the low-cost milker just mentioned continues to do what it has set out to, that is, delivers the milk into a closed dish without exposing it to the open air, it has solved the problem of dirt to a nicety, for no air passes down the hose from the pump into the hose that carries the milk to the pail, which ought to be closed and to contain air at the outset that has not come in contact with the cow atmosphere and can easily be sterilized by passing it through water.

Another View of the Milking Machine

TOUCHING this important matter the well-known dairyman, L. S. Hardin, of Kentucky, in the Jersey Bulletin, says: "There are two great possibilities about to be sprung upon the dairy public that will, if they work out as they look, revolutionize the milk business. While our so-called scientific stations have for years been experimenting along the lines of doctoring sick milk, either by partial or whole sterilizing or by adding so-called embalming fluid to check its acid formation, the men who have been called daffy for trying to invent that impossible machine that will milk a cow have stumbled onto two wonderful discoveries.

In the first place they have just about perfected the milking machine so that it is workable, and at the same time have shown that it is just as easy to take the milk from a cow without exposing it to the outside atmosphere as it is to milk it in the presence of all the dangers that exposed milk is subject to in the dirty cow stable; and that when so secured and kept that way it will remain sweet for weeks.

That one would naturally think was enough to immortalize the milking machine, but there is another and perhaps greater good coming from this new candidate of our suffrages, and that is that instead of injuring the cow's teats and udder she actually likes it and enjoys the process of milking.

When we consider how many fine cows have been absolutely ruined by bad milking, or a part of her udder destroyed by the same means, what a change for the better it will be to know we have a machine that does a steady, even work, silently, with no temper to be ruffled and with uniform treatment all the year round, and to the pleasure and enjoyment of the cow.

Taking these two things together, you need assistance. It's

Such a result will be a marvel, for it is found that such milk can be sealed up without cooling and kept a very long time unchanged. I am told that the machine is complete and has been used several weeks by the inventor, long enough to satisfy him that there is nothing more to do but put it on the market. In case it is necessary to milk faster than two cows at a time a small gas engine can be used, and it is said that as soon as a dozen cows are begun the first will be finished, so that the milker can be shifted to cows further on, so that only six milkers would be needed for a herd of any size, as they would keep one man busy.

As to power, the expert is now called on to put the new free alcohol law into use and make a product that will take the wind—and the smell—out of gasoline and at the same time provide a market for farm products that have been of small value till now. I am in a position to watch this new milker pretty closely, for it is a Buffalo invention, and the inventor now considers his work done on it and is free to give out any points that it has developed. He does not try to conceal the fact that the no-air discovery was an accident. Till he found how long the milk would keep if never exposed to the air and that such milk is practically sterile as well as immune from dirt, he supposed that it needed cooling in the air to take its peculiar cowy odor out and to make it keep.

I do not understand that any other machine makes this claim and if this one does not fall down in some unlooked-for particular, it seems that we have a revolution right here and one that the milk business will welcome as a solution of two problems, dirt and early souring, which have till now been next to impossible."

feel that the news is too good to be true; but why should they not be true? We know perfectly well that the milk is pure in the udder, and if we can get it out without exposure to the air it will remain pure. We know that this milking machine goes through all its processes under cover for the milk, and if an air-tight pail is close up to the cow, why not keep the whole process air-tight?

We know also that if the machine works smoothly (as some of them do and now have done for two years with no apparent injury to the cows, while the cow shows every sign of enjoying the process), why may it not be true that under such circumstances she will give more milk with far more comfort to herself and no liability to abuse with injured udder from the bad temper of a poor man milker? Are not these two startling propositions that make us gasp with wonder that all of us have heretofore been so stupid?

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THE PRESENT STATUS OF THE MILKING MACHINE

(Continued from page 7)

udder of the cow and kept away from the air will keep sweet very much longer than milk drawn by hand, aerated and handled according to the ordinary methods of handling milk. We are fast approaching the day when the aerating of milk will be a back number, and yet for years our scientific men have advocated that as being the best method of getting rid of the animal odor and consequent bacteria in order to have a good quality of milk.

Another vital point in the construction of a milking machine is that it should be easily convertible from hand to power, and vice versa. Cows will be broken in to the use of the milking machine much more readily when the hand power machine is used and the action of the machine is gently and carefully adapted to the individual cow while she is accustomed to the machine. After this is once done, power can be applied and the mechanical action of the machine will be better.

To sum up what may be regarded as the essentials of a successful milking machine, it may be stated in this way: A machine that is "fool proof," that is, one that a man could not injure a cow with should he deliberately attempt it. A machine so simple in its construction that anyone can replace the parts if necessary or repair it without the machine being shipped back to the factory, or an expert coming to do the work. A machine that can be cleaned and scalded in a few minutes. A machine

that is light enough to be easily carried from one pair of cows to another, as all machines milk two cows at a time.

As I understand the matter, the successful milking machines that are now in use are the Burrell machine, made at Little Falls; the Globe machine, made at Roanoke, Virginia, and the Mehling machine, made at Baltimore, Md., and the Calfette milking machine, made at Buffalo, N. Y. There are a few other machines on the market, but they are not in general use so far as I have been able to ascertain. The newest machine on the market, and the one possessing the greatest number of essential improvements, is the Buffalo machine. I understand it has only been on the market a few months, and in an investigation of the general problem of milking machines it is ascertained that this last machine claiming the attention of dairymen should be carefully looked up. The three machines first mentioned have been on the market for some time, and dairymen are more or less familiar with their operation. It is a question of getting the best machine from the many machines before them, each constructed on different principles. It certainly is the part of wisdom that each machine should be thoroughly investigated before purchasing.

One thing we can rest assured of—the days of mechanical milking are certainly here, and it will only be a question of a short time before milking machines come into general use.

What the Milking Machine is.

IT would be difficult to mention a subject that will sooner interest a group of dairymen than that of the milking machine. Many men have worked on the problem of a successful mechanical milker, and so many have failed that the mere mention of the name not infrequently brings a smile of incredulity. Less than two years ago,

I had occasion to write about a machine that I had examined, and which I became satisfied was unsatisfactory. At that time it seemed to me evident that a satisfactory machine for milking cows could hardly be expected. The publication of that article brought me several letters from various individuals who were working on the problem, some of whom have since brought out the machine. About the only one of these that is now a claimant for public attention is the machine made by D. H. Burrell & Co., known as the Burrell-Lawrence-Kennedy machine. This machine is now in constant use on a number of farms, and is being thoroughly tested by several Agricultural Colleges and Experiment Stations. It is attracting more attention than all other machines combined, and so far as I know is the only one seriously considered by State Experiment Stations at the present time. This machine was exhibited at the recent meeting of the New York State Dairymen's Association, where it was used in the exhibition hall to milk six cows twice daily during the convention.

The development of this machine has been the work of considerable time. The Lawrence-Kennedy machine has attracted attention by its partial success, at least, in Australia and New Zealand. The Burrells procured one

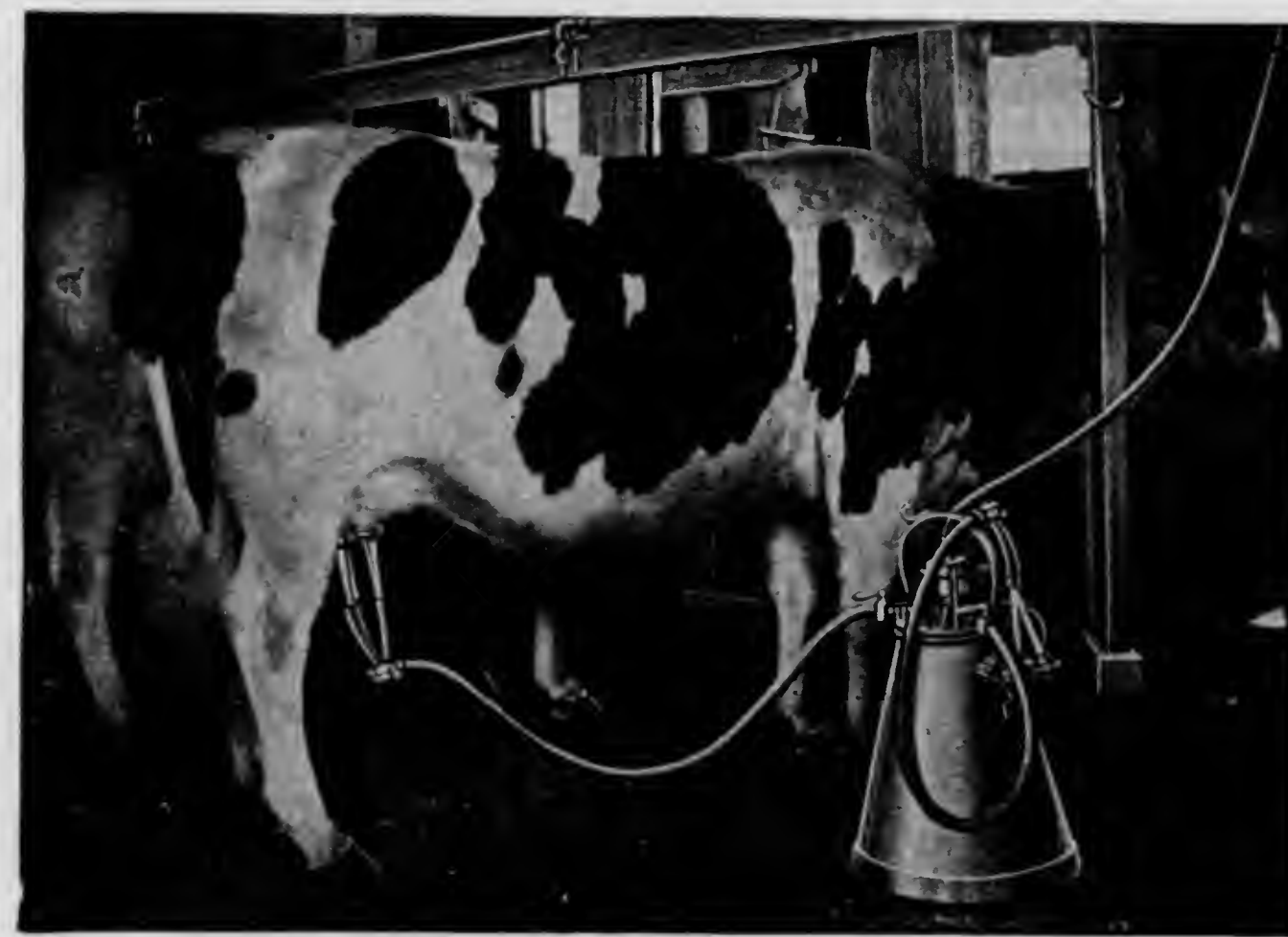
of these machines, but upon making tests with it, found that the machine needed improvements. Mr. Loomis Burrell went to work on the machine and with the assistance of several trained mechanics he has developed the one now before the public. It is said that over a thousand of these machines are in use in Australia and

New Zealand and that at least six thousand cows are being milked by the Burrell-Lawrence-Kennedy machines in this country.

The operation of the machine is simple. In the first place there must be some power by which to operate the pumps. From two to six horse-power is the amount generally needed, depending upon the size of the machine selected. An exhaust pump is run by the power. Its purpose is to remove about half the atmospheric pressure from a reservoir and system of piping. The

along the row of stanchions. The reservoir has a safety valve so that no excess of exhaust may occur, and there are two pressure gauges in the system, one near the milker, and the other on the reservoir. The operation of the engine and the pump keeps a steady pressure in the piping of about seven or eight pounds, as against the usual atmospheric pressure of fifteen pounds.

It is the pail that has required so much time and study to perfect. It is built cone-shaped so as to withstand the atmospheric pressure. On the cover, which is fitted to the pail with packing, there is a pulsator ingeniously constructed so that it is operated alternately by pressure and exhaust, and its operation throws the tubes leading



Burrell-Lawrence-Kennedy Milker, Little Falls, N. Y.

from the cow's udder to the pail. It is this alternation that does the milking. About fifty pulsations per minute are considered enough, and the interval between each suction gives opportunity for the milk to fill the teats.

To operate the machine, the attendant, after starting the power, takes the pail and places it between the two cows to be milked. A piece of tubing is attached to the pail, and is also slipped on one of the nipples which protrudes from the pipe on the stanchions. A stop-cock in the nipple is turned, which throws the suction on the pail. There are two other tubes leading from the pail and these are closed by turning stop-cocks before opening the one over the stanchion. Now comes the most difficult part of the operation. Taking the four teat cups that are attached to one of these tubes, the operator bends the small tubes, connecting to the cups, so as to close them, and opens the small stop-cock on the pail cover. The vacuum is now on the pipe leading towards the cow to be milked. A dextrous movement, which is soon learned, turns the teat-cup upward to the teat of the cow and the suction instantly brings the cup into position on the teat. It takes but an incredibly short time to adjust the four cups, and the milking of that cow then proceeds automatically.

Pure Milk and Mechanical Milking

Written for Blooded Stock by Ernest Jacques, Buffalo, N. Y.

THE rapid development of machinery for use in all classes of business enterprises in the United States has unquestionably been the prime factor in placing our country at the head of nations. In twenty-five years we have changed from an importing to an exporting nation. There is almost no other industry which has received the attention from inventors of machinery and of processes as has farming. The use of machinery, together with increased mail and transportation facilities has placed farming in the list of the most desirable and profitable of our business enterprises. To so great an extent is this true that today we see a majority of bankers and business men of this country directly interested financially in farms.

Of all classes of farming, dairying and stock raising appeal strongest to the progressive man who loves the freedom of out-door life and close relationship with the living things of nature. Yet we find in dairying the most marked instance of neglect, or failure to improve on time-honored customs. We refer to the milking of cows. We are pumping water, cutting feed, raising crops, manipulating and bottling milk, all by machinery; yet the most laborious and disagreeable part of dairying has only now received the needed attention from inventors. Many people who have tried dairying and found it otherwise profitable and desirable, and many people who have long desired to enter the dairying field have been driven out of that business because of the unsanitary, laborious and disagreeable task of milking. Farm help has become scarce, prices have advanced both for labor and for product. City councils, state legislatures, the United States Congress, have all been compelled to spend much time and many millions of dollars in an endeavor to make dairy products even passably sanitary. For milk, with all its products, is the most valuable food we have. While the success of these efforts has been marked and

The other set of cups is as quickly adjusted on the udder of the opposite cow, and then the attendant is at liberty to completely view the proceedings while the cows are being milked, or he may take another pail and set it milking two more cows, and so on. The number of pails that one man can care for depends upon his ability to work quickly, but with the aid of a boy he may handle five or six pails, or perhaps two or three pails, unaided.

As the milk does not come in contact with the air, and all the appliances of the machine may be sterilized, it follows that milk taken from the cow by this machine is free from dirt and dust, and consequently, free from bacteria. In fact perfectly sterile milk has been obtained by means of the machine.

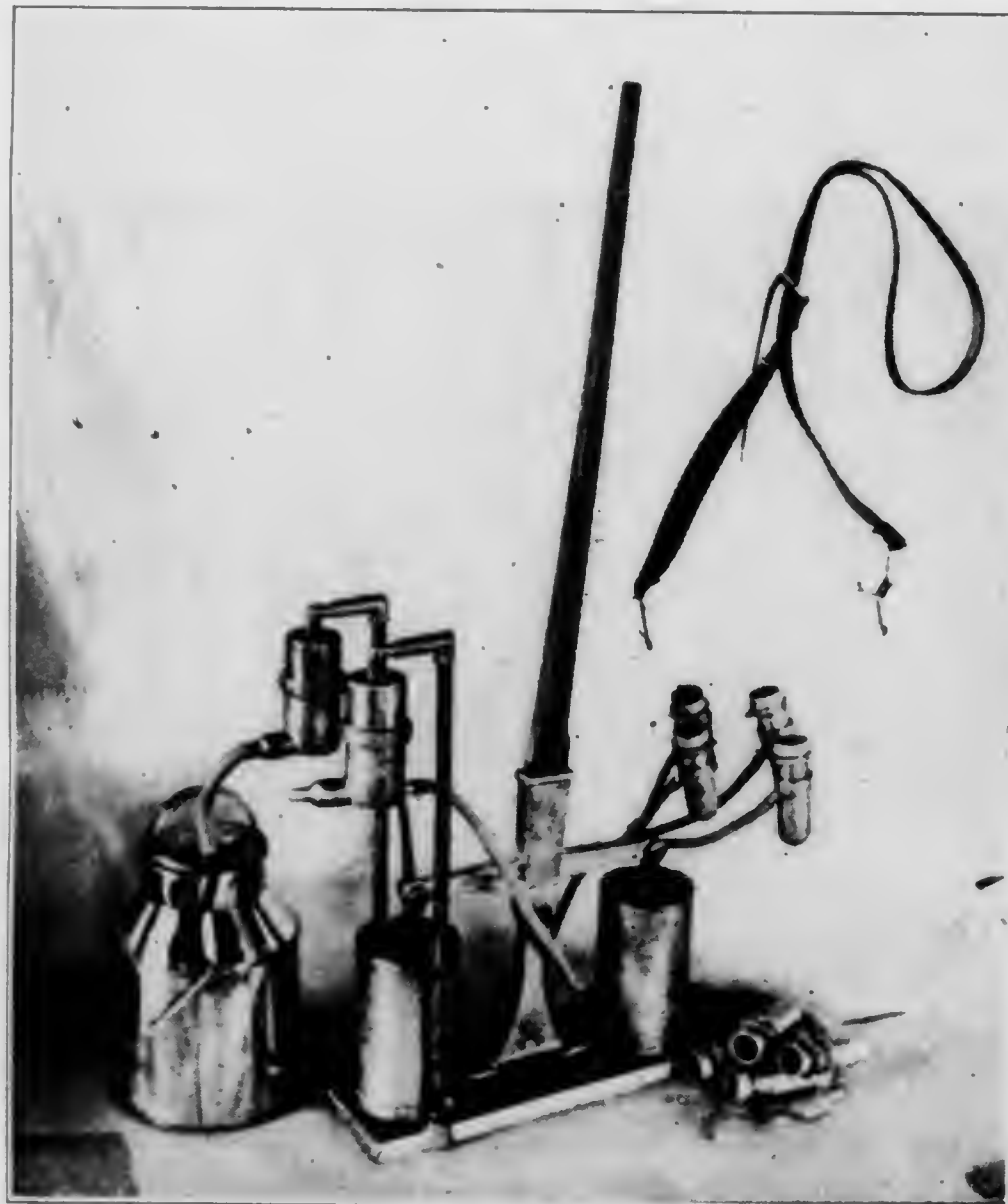
The question that usually comes up when discussing the milking machine, is whether the cows like to be milked that way, and whether the machine may be readily kept clean. About this, I feel quite confident. I have seen cows milked with the machine a number of times, and have carefully examined one of the machines after more than a year's use. I regard it as a success, but, of course, more time may be needed to make conviction a certainty.—Written for Blooded Stock by H. H. Lyon, Chenango County, N. Y.

of great value, yet they are proven to be but makeshifts at the most, seeking to govern an evil rather than to strike at its roots and remove its cause. So today we see particles of straw, manure, bits of hair, insects, malodorous and disease bearing air, daily contaminating the milk we drink. And this, in the face of the fact that the all-wise

Creator arranged that no other food should be so absolutely pure as milk just emerging from the udder. Laws have been passed to limit the number of foreign germs to from 200,000 to 500,000 specimens in a few drops. Nature provided that there should be none of these germs in milk. Scientists declare that saliva is an almost perfect germicide; if this be true the suckling young practically destroy all the foreign germs which may have lodged upon the teats, thus receiving the milk free from contamination. Mankind, however, has elected to obtain the milk from cows and goats artificially, and has suffered greatly by carelessness and uncleanness.

Only within the last two or three years has any practical progress been made in the art of taking milk from animals. Many attempts have been made to produce satisfactory machinery. But the extremely sensitive and highly organized tissues of the

cow with the infinite variety of contour, the great difficulty of maintaining sanitary conditions, and trouble with inexperienced operators, have all blocked success. Machines have been made and then discarded for various reasons. One machine would be too harsh and injure the cow, another difficult of maintenance and operation, another too complicated for a farm machine, still another too expensive, and another would owe its defeat to lack of sanitary results. Yet today we can congratulate ourselves that this problem, long neglected, long fraught with discouragements and failures, has been solved, that the result so hoped and prayed for has been attained.



Calfette Milking Machine.

There are today several milking machines in successful operation in various parts of the country. Wherever they have gone to dairymen who persistently apply themselves to mastering the art of mechanical milking, there is a marked increase in activity and sentiment toward pure milk. Established dairies are increasing their stock, and improving their barns, new dairies are being established, sanitary conditions are improved, preparing and marketing milk products have become easier and cheaper. A feeling of encouragement and hope has taken the place of discouragement and the disappearance of herds.

In all these milking machines, great stress has been laid upon the idea of pure milk; with continued use of a machine without injury to the animal a close second. Economy of time does not seem to be so large a factor. Yet the fact that the machine will always do the same grade of work, even in the hands of indifferent operators, is a very great advantage, since a change of operators is not apt to reduce the quantity of milk. True, where an ex-

pert is needed to operate a machine, there might be as much difficulty in obtaining help as there is today wherever hand milking still holds. Yet it should seem that the absence of the many disagreeable features of hand milking would make machine milking an attractive rather than an objectionable trade. It would be reasonable to expect that, where cheap power could take the place of a number of men there would be real economy, to say nothing of the greater independence in milking.

The ideal machine for farm use is the simple, strong, durable one, without the high finish and polish required for other uses. And the manufacturer who succeeds in producing a milking machine which is simple and durable, which milks without injuring the cow, which is perfectly sanitary, easily cared for and kept in repair, and so reasonable in price that the small farmer and dairymen will not find its ownership a burden, will undoubtedly receive ample and well-deserved remuneration for his time and effort, besides conferring a great boon upon humanity.

What Users Say About Milking Machines

IT is interesting to read about milking machines and the success being had with them and especially to read of actual experiences. In Canadian Dairyman A. Price tells of the experience with the machines which they have been using since last January. He says:

"Before we got the machines seven men were required

to milk seventy-five cows. Now we have about sixty-eight cows milking and with three machines, each of which milks two cows, I, alone, can do the milking and separating in one and one-half hours. The machines were purchased to milk 80 to 100 cows in an hour, but so far we have used only three of the six machines that were furnished us. By using all of them we can easily milk eighty cows in an hour. One very desirable feature is the ease with which we can get the milk from cows that have small teats and are, therefore, very hard to milk by hand. Three sizes of teat-cups were supplied, and the smallest size works to perfection on cows that have small teats.

At first the cows wondered what was happening, but only two or three gave any trouble, and they soon became quiet and were easily milked by the machines. The teat-cups were supposed to be kept on by suction, but now and again, when the rubber becomes slightly worn, they are easily shaken off. This can be prevented by putting a belt around the cow and under the teat-cup attachment. In a few cases the noise, caused by the suction, made some of the cows nervous, but they soon became used to it. Some cows that could not be milked by hand, except by very careful milkers, stood perfectly quiet after being milked a few times with the machine.

It is not a difficult matter to keep the machine and the tubing clean. By having a tub of hot water and a tub of cold water on hand when the cows are all milked, and setting the teat-cups in the cold water before the power is turned off, and transferring them to the hot water, the job is done easily and in a very short time. The fittings and all connections can be washed just as easily as an ordinary pail. The teat-cups are made of copper and tin-lined on the outside. The tubing is made of sanitary rubber composition, which is very durable. Ordinary rubber will not stand boiling, and would impart a rubber taste to the milk passing through it. The tubing supplied with

these machines, however, has neither of these objectionable features. When the machine is not in use the tubes are kept in a brine to preserve them. Before being used fresh water is allowed to run through them a few minutes.

After a thorough test of the various makes of milking machines at the Kansas Experiment Station the following conclusions are given regarding them:

A milking machine will milk cows as thoroughly as the average milker.

Some cows give more milk when milked with a machine than when milked by hand; others give less.

It is extremely necessary for the man in charge to fully understand how to operate a milking machine.

To reach the highest degree of success cows should be selected and bred to respond to machine milking. If this factor is taken into consideration machine milking will be equally as successful as hand milking.

H. B. Gurler writes: I have now been using your milking machines since Dec. 6th, 1905, and am so well pleased that I wish to fit out all my milking stables with them. I have 180 cows and with the experience that I have, am sure that four milkers will do the milking.

The machines worked very nicely, milking sixty-four cows in one hour and sixteen minutes. There were two dairymen here from St.

Paul to see the machines, and they were so much pleased that they wished to order immediately. One of these men had a dairy of over 100 cows and the other about half that number.



Calfette Milking Machine, Buffalo, N. Y.

—\$—\$—\$—\$—\$—\$—\$—

A number of tests have been made to determine the proper vacuum to be applied for milking. The vacuum was changed from 11 inches to 20 inches. At 11 inches the average test indicates that 1.77 pounds of milk were drawn per minute; at 16 inches pressure, 2.3; at 17 inches pressure, 2.4; at 20 inches pressure, 2.5. While milking under this strong vacuum the milk was removed at a slightly greater rate. It, however, proved to be more uncomfortable to the cow, and a decrease in the flow of milk was discovered. Approximately 16 to 17 pounds is the safest vacuum for milking.

Notes for the Stockman

Written for Blooded Stock by W. F. McSparran.

TAKE Pennsylvania for instance. It is said that in dairying this state ranks second, and I believe in some points first of all our states. We know that no other state has so many good markets for first-class dairy products. We have plenty of good farmers and we rather pride ourselves upon the quality of our intelligence, yet I have seen it stated that our exceptional director of farmers' institutes, in making a catalogue of our State's achievements in agriculture, boasted that our cows average 140 pounds of butter per year.

Now, of course, when we get the average work of our cows thus down into official figures, every sensible farmer knows that cows doing so poorly as that are "nothing to brag about," but rather something to be ashamed of. If that is a true average, and such officials seldom sin on the side of making things too small, we know that there is a respectable minority of good dairymen in the State who may be averaged up to two times 140 lbs. of butter per cow; hence there must be a discouraging majority of dairymen who have been slack in attending farmers' institutes, with their cows falling away below the average in yearly production.

It is just as hard for a dairy as a stream to rise higher than its source, and the source of the dairy is the dairyman. It is not the Pennsylvania average cow that is the shame of the dairy but the Pennsylvania average dairyman, and he is the chap the fellows who have his dairy salvation in charge should be looking after and bringing him into his own.

It cannot be gainsaid that we farmers are sticklers for traditions and old customs. The sacred cows of our uddies, in the barefooted, frosty days of our youth, were carried through the winter on nubbins, corn fodder and the straw stack in the barn yard, and inasmuch as we are no better than our fathers (and plenty of us not nearly as good, I would add), it follows that what was good enough for their cows must be good enough for ours. Long ago the cows were not made proud on silage, oil meal and various breakfast foods remains, and why should our cows expect it?

Ah! my son, that's just it—our cows are no better. We are no better than our fathers, for our fathers lived the simple life—and the strenuous—especially many of our mothers. Unhappily there is no selection—and often no

election—in human breeding, so we need not wonder that we have failed to improve upon the parent stock.

But in our cattle, in our herds and flocks, we can elect, select and reject. Many of our fathers did better than we because they did the best they could. We don't. Often merely part of the time we don't. Our fathers did not have the widely diffused improved blood lines that are so easily possible to their sons today in all branches of domestic animal husbandry.

Go to any of the best dairy herds in the State, where scientific, practical work is being done, and you will find cows of pure blood or high grades with a pure blood bull acting as a grader-up. Go to the herds that are represented by Institute Martin's average, and you will find the cows made up of all the breeds under the sun, and not one child of the herd wise enough to know its own father; all bred as our fathers bred them, from generation to generation, back to the operations of Jacob at the watering places.

And ask some of these hereditary dairymen what their ideal cow is and they will likely tell you they would want a cow that requires no nursing, one that can look out for herself from May the tenth till corn is husked in the fall, and pass a profitable and pleasant winter on nubbins and fodder and straw and a pinch of bran, and not get hollow horn, give a lot of milk, drop a big, strong veal calf, sired by a stock-yard bull, and in a couple of years fatten up into a good, heavy beef.

The fathers used the cows they had and found them generally profitable; so the sons, looking backward, dream of some such cow—a matron of all work, "a general purpose animal," some genius called her. And today all over the land the average dairyman is calling for her, and a lot of average professors are baying in the hunt.

I actually know men who expose their ignorance before a registered cow or bull or sheep or hog. They will tell me they can make more pork and make it cheaper by crossing a ranger white sow with some big black boar, than I can from my pure bred blacks or my neighbor from his registered whites. They won't pay fifty dollars for a registered dairy bull calf, for some neighbor who uses a grade bull gives away little bull calves that will never make decent veal, "and they look just as good as that one you ask fifty cents a pound for."

Thereby we keep our averages,



Taken from a photograph of a harvesting scene in Italy, showing a Johnson Binder at work. A great number of the Johnson Harvesters are in Italy. Send to the Johnson Harvesting Co., Batavia, N. Y., and get their catalogue.

Written for Blooded Stock by W. R. Gilbert, Alberta, Can.

It would, perhaps, not be fair to judge the average farmer's appreciation of pedigree in live stock by the character of the animals he keeps (men often have champagne appetites with a beer purse). To my knowledge there are many stock owners who hold in high esteem the virtues of recorded lineage, who have never succeeded in acquiring possession of a stud, herd or flock based on current pedigree lines. Their ambition, as they freely confess, is to own pure bred animals, but they have also to admit that the carrying out their desires in this direction has hitherto been beyond their powers and may never come within their reach. The number of farmers who own what is commonly called pedigree stock, is truly insignificant compared with those who manifest a hankering after so rich a possession. The leading reason for the inability of so many to realize their ambitions, is that they believe that large capital is required in order to establish and maintain such classes of animals, and that while the profits obtainable from them are often liberal, yet the pursuit is too speculative for the farmer of limited means, and who has to derive the whole of his income from his farm, to engage in. This estimate of the pedigree stock breeding business, which is so extensively held, is only partially correct. It is undoubtedly true that vast sums of money can easily be spent in founding and building up of pure bred stocks, but on the other hand, it is equally warrantable to affirm that success may be achieved through inexpensive, if necessarily longer and more tortuous channels. There are two distinct methods of working one's way into pedigree strains. The simpler and more expeditious being that usually followed by the farmer of independent means—that is buying selected animals, irrespective of price, from the best of stocks; and the other, the more tedious, inexpensive, but more accessible course to the average farmer, that of starting on a modest beginning, and working up, as it were from within, instead of by the wholesale acquisition of costly improving material from other sources. With certain breeds of stock, this latter system may be pursued, and success attained without difficulty, although, of course, the rate of progress must inevitably be slow.

Examining Horses for Soundness.

Some excerpts from a bulletin issued by Purdue University on the above subject will be found interesting. They are:

Generally a balky horse is one that refuses to work. Some will work single only. Others will work only when harnessed with another horse. At public sales a horse is sold to work well double, but works a little green when worked singly, or vice versa. When this remark is made from the auctioneer's stand one should always be on his guard and see that the animal is young enough to be unbroken. It is not generally from fear, but from

THE JOHNSTON BOOK

"NOT IN THE TRUST" FARM TOOLS

56 Years Experience back of every tool we make

When buying farm tools, three things should be considered—utility, durability and price. First, what is the utility of the tool or machine; will it do the work you wish to perform better than any other make of tool of like nature; will it save time and trouble? Second, is it durably constructed; will it stand the strain without constant tinkering and loss of time waiting for repairs; is it built to last; is there quality in it—a reputation for honesty back of it? Settle these points satisfactorily and the last point, price will be easily disposed of. If the tool is made by The Johnston Harvester Co., 56 years of progressive experience and a reputation that is a guarantee of merit as good as a gold bond, are back of it. Farmers know that the name "Johnston" on a machine means a tool that embraces in the highest degree, utility and durability at a price you can afford to pay—a price founded on merit and not a combination to control trade. "Not in the Trust" means much to the buyers of farm tools. Do you appreciate what it means to you? Then don't buy a tool until you get the new Johnston Book describing our complete line of "Not in the Trust" farm tools embracing machines for all sorts of farm work, from harrows to harvesters, every one the best tool that's built for its work. The book is free. Write for it today.

The Johnston Harvester Co., Box 16, Batavia, N. Y.

stubbornness or from a determination to have his own way that he will not work. He is a very dangerous animal if he rears and plunges, as he may fall over backward, plunge forward sideways, sometimes throwing himself down. Animals that stand persistently, even with the fearful beating or whipping that is sometimes given, are the least dangerous. The balky horse should not be purchased at any price.

There are some horses that are so vicious and so dangerous that one should use the utmost care and caution in going about them. If they be ticklish or shy they are not as bad as those that bite and kick. If they cannot succeed in kicking or biting, they may strike with their front feet or attempt to squeeze one against the sides of the wall. While being groomed they may bite the halter strap. Some try to lie down, strike, and in many ways show their dislike of being curried.

Some horses may be perfectly tractable when being handled, but when approached with harness or saddle they begin to rear, plunge, kick, squeeze or bite. Others refuse to take the bit even after they are harnessed. Some will try to swell themselves up when the girth is fastened; others will object to the placing of the crupper. Again we find horses that will object to being placed in shafts or being mounted.

The feet should receive special attention, not altogether from the disease point of view, but they should be taken up, one after the other, in order to be sure that they will permit shoeing without difficulty or danger to the smith. A horse that makes it necessary to be placed in stocks or to be thrown each time shoes are placed, is a very great annoyance.

Nothing should be left untried in purchasing a horse to determine whether this vicious habit be present or not. An animal with such a habit is always dangerous, either in approaching a strange animal or to the owner. He may be tested by leading close to another animal, noticing his behavior whether he lays back his ears, dilates the nostrils, curls the upper lip, straightens out the head and shows the teeth. Some horses will plunge viciously upon their victim.

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See page 3 for Program and subscription offers for 1907.

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15 to 35 CTS. PER ROD DELIVERED

LARGE LITTERS OF PIGS

I find many swine breeders who cling to the idea that the sire has as much to do with the number of pigs in a litter as the dam. In visiting a herd of swine the owner of the herd is always proud to show you the sire of his herd and tell you his good qualities, and among the rest he is sure to tell you what a great pig-getter he is.

Did you ever stop to consider that the sire has nothing whatever to do with the number of pigs in a litter any more than the pollen on a stalk of corn has to do with the size of the ear and the number of grains it contains? If he has why not breed the sow out of season?

If you desire a large litter of pigs you must have the sow in perfect condition just as you must have your corn in perfect condition if you desire large, full ears of corn. How often it is the case that a large sow will have only two or three pigs and that large stalks of corn have very small ears, and the whole trouble is because each has not been in proper condition when impregnation took place.

This year we had a great crop of corn because the stalks of corn were in perfect condition when the pollen came in contact with the silks on the end of the ear. There was no more pollen this year than in former years when the corn crop was short, so that the fertilizing qualities in the pollen are of no avail unless the ear is in proper condition to receive it.

This rule applies just the same to the breeding of swine as it does to the breeding and growing of corn. In either case impregnation must take place as a basis for the production of what is to be produced. Certain little cells or eggs come forth to be fertilized. These must be in perfect condition and there can be no more pigs in a litter than there are eggs brought forward through the sow to

be impregnated by seed from the sire.

Why is it that a single service of the boar sometimes produces one pig and again seventeen or eighteen, all the same day under like conditions? Is it because the sow was at fault? She was not properly cared for and fitted for the occasion. We never give our sows better care than we do just before we want to breed them. They are given all they can eat and if we find we have fed a little



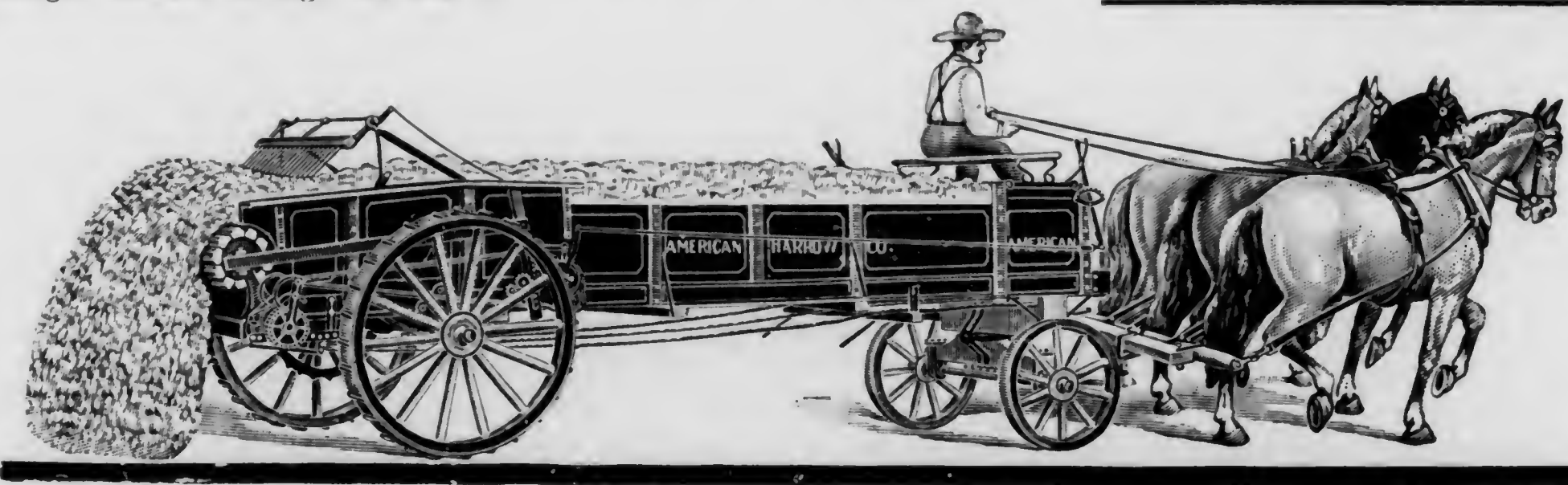
Duroc-Jerseys owned by W. H. Robbins, Springfield, O.

too much corn we substitute wheat or anything else they desire. We make it a point to have them just as near in perfect condition as is possible.

Sometimes a sow runs over for some cause when we think she is safe in pig. She afterwards "comes round" after we have taken off the extra feed and she invariably has a smaller litter than she was accustomed to having when she was fed heavily and all she could eat.

If all of the fertilizing qualities from the pollen of a single stalk of corn could be made to take effect on a single ear of corn it would be more than a rod long, and all of the fertilizing qualities of a single service from a boar of one of the most unprolific breeds would produce more than a corload of hogs if he were only sure.

It is true the boar should be well fed and properly cared for, because he has much to do with the quality of the litter, but when this is done the size of the litter is determined by



A machine for the farmer's winter use. Manufactured by the American Harrow Company, Detroit, Michigan.

BLOODED STOCK for January.

the sow, so that much depends upon the breeder and feeder both as to the quality and quantity of the litters.

We use a boar from one of the more prolific breeds on our best sows because we often keep some of the progeny for brood sows and he has an influence on the pigs as well as the sow, but when it comes to the young sows we use a boar that will produce quality, because the pigs will all go to market, and we do not care anything about what influence he may have on the pigs for any other purpose than for commercial feeding.—W. S. Tomlinson in Stockman and Farmer.

MILK vs. BEEF.

When it is considered that the same foodstuff fed to cows produces very much more nutrient in the shape of milk than when fed for beef, it is seen why the dairy industry is so important. As stated in the work on feeding by Prof. H. R. Smith of the Nebraska Station, "64 per cent. more energy is expended by the steer in elaborating food in the form of meat than is expended by the cow in elaborating the same quantity in the form of milk." Of course it must be understood that the kind of cow to do this must be of the dairy type.

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BLOODED STOCK for January.

HE DIDN'T KNOW THE FACTS.

Worked Hard—Lived Poor—Died Poor. Let This Story be Your Guide.

Sometimes one man's failure is a lesson to the world. This is that sort.

A certain barren farmer, a few tumble down frame buildings, a mortgage that outlived life, are all that remain to mark the failure of a dairyman who worked his life out in poverty through using his hands instead of his head.

When he was gone, a neighboring farmer said of him, "The greatest pity is not that he died poor, but that he lived behind the times. Not being up-to-date, he could not meet up-to-date conditions. He mistakenly believed a farmer could be more successful as a mere lifting jack than as a thinking machine. When he died he was the only farmer around here who did not have a cream separator. He used cans to skim his milk. He never knew that a cream separator would save enough cream that his cans were daily losing, to pay off his mortgage and give him a comfortable income. He never tried to find out. That's only an example—he was just as old fashioned in other ways—so he died under a mortgaged roof."

Friends—think of that man! A life of hard work with his back—no comforts, no joys while he lived—nothing to show at the end. Had he put in just one hour of thought—had he realized what a Sharples Dairy Tubular Cream Separator was absolutely certain to do for him—if he had only taken the trouble to write for and carefully read the practical, commonsense catalog telling plainly just what the Sharples Tubular is sure to do for any man who keeps cows—he would not have lived and died under the shadow of poverty and a mortgage.

But how about you? Are you sweating—saving—standing losses today, right now, that you don't need to stand? You are no lifting jack. Don't try to raise the mortgage with the muscles of your back, but do it with your brain. Don't trust your crocks, your pans, your cans—those dairy thieves that steal your profits—but just take a sample of your skimmed milk to the nearest Sharples Dairy Tubular agent and let it skim it again, with the Tubular, and show you, in pints and quarts, the cream your cans are wasting every day.

And today—before you forget it—before you get into the "lifting jack" habit—write for the complete catalog No. 300 and ask for the free and helpful book "Business Dairying." Both will be sent to you gladly, if you ask plainly for catalog No. 300 and "Business Dairying." Address The Sharples Separator Co., West Chester, Pa., Toronto, Can., Chicago, Ill.

COWS FOR MILKING.

As a practical question it is idle to talk about Shorthorns or any other beef breed for milkers here. England has in considerable measure



Contains all the money-making points of dairying. Among the subjects treated you will find How to Feed, What to Feed, When to Feed, What Foods Produce Most Milk, How to Take Care of Milk-Producing Foods, How to Feed Silage, the Care of the Milch Cow, and many other profitable and practical suggestions that help swell the profits of the dairyman. With the book we will send additional information telling you how and why you can get the most out of your milk by using the

Sharples Tubular Cream Separator

We guarantee that with a Tubular you can get 50 per cent more cream over the old pan method of skimming, and 6 per cent over any other cream separator made. Sharples Separators get all the cream and the Tubular is the easiest running, easiest cared for, and easiest kept clean. There is just one tiny piece in the bowl, the milk can be low and handy, the bearings are self oiling. Write for the "Business Dairying" at once stating number of cows you keep. Ask for booklet D.300



Mr. S. L. Boyer, Venetia, Pa., says "The Tubular makes me \$250.00 yearly."

The Sharples Separator Co.,
Toronto, Can. WEST CHESTER, PA. Chicago, Ill.

preserved the milking strains of Shorthorns, but when the intense beef craze struck this country we dropped the Bates cattle and everywhere sought the Scotch type, and for years have been breeding along that line, till now it takes two Scotch cows to raise one calf if the milk is relied on for that purpose. A Wisconsin correspondent says he has tried to grow dual-purpose cows out of Shorthorns, but can't get a sire belonging to the milk strain, and his success is about one to forty, and he has abandoned the uphill work and taken to dairy breeds, and finds that the only practical way to build up a dairy herd worth maintaining. The dairy Shorthorn went glimmering in this country when the Scotch type supplanted the Bates, and this is about all there is to this question of making dairy cows out of this breed.

The dairy industry is a rapidly growing one and the only way to lay a foundation for a dairy herd is to use dairy bred bulls and cows, and steer clear of beef breeds

A horse, especially if he is nervous, is much more likely to be alarmed by the sound of a noise he cannot see than by the sight of things he does not understand.

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THE DORSET HORN.

It is with some hesitation that the writer approaches the subject of the Dorset Horn, or the Dorset, as it is commonly termed in America, seeing that he has long been an ardent admirer of this breed, which causes him to fear that he may err by giving undue prominence to his favorites. With this caution to the reader, however, he will proceed to consider this, one of the oldest British breeds.

In the southwest of England lies the county of Dorset and the adjacent county of Somerset. Very fertile these counties are, beautifully diversified by hill and valley covered with lovely farms and homesteads set thick with tiny villages, but without any notable cities. The soil of Dorset varies from a thin chalk upon the Downs to a rich clay loam. The climate is very mild, owing to its location and proximity to the sea. For many centuries this has been a land inhabited by farming people, a land prized and jealously guarded, as has been proven by the remnants of ancient earthworks built before the days of the Romans.

Centuries ago, before cows were much used in dairies in Dorsetshire, it is said that sheep were the common dairy animals and from this beginning probably came the Dorset Horn of today, with its wonderful milking powers, its great fecundity and its ability to wean at any season. The original Dorset sheep was a large, rather coarse, long-haired breed, with both sexes having horns, not very comely to the eye, but having wonderful powers of maternity before mentioned. It is a curious fact that both sexes of Dorsets have horns, and so far as we know, have always had horns, seeming to point to a primal origin quite different from that of some other English breeds. All efforts to improve the Dorset sheep by mingling the blood of other races have proved unsuccessful, so, that improvement has been made strictly within the breed. Within the last twenty-five years great change has been made in the Dorset sheep.

Without dwelling at length upon points of form, which in the main should be the same in all breeds, the ideal of which all breeders hold in common, it may be said that the Dorset of today has much the form of the Southdown, with added size. There is, however, a little less symmetry, especially about the back, with generally a larger pelvic development and more udder. The faces are pure white and there may be a little wool upon the forehead, although Original Dorset. Horns weer bare about the head. The horns of the rams are very large and curve spirally forward, so that they appear as though looking through a pair of enormous spectacles. The ewes' horns are much lighter and curve forward and inward, rather in front of the eyes.

Dorset rams should possess every appearance of masculine vigor, with large bone and moderately short, strong legs. The horns of the Dorset are not so much of a superfluity as are horns upon cattle, seeing that the mental qualities of the Dorset

BLOODED STOCK for January.

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sheep inclines it to be pugnacious, and to stand its own when strange dogs come about even perhaps to take the aggressive and drive intruders from the field. This trait is especially marked when the ewe has a young lamb, and even the collie well known to the flock finds it prudent to then give the ewes a wide berth. This trait of the Dorset has led to their being extensively advertised as "dog proof," which they are not, of course. Dogs can, and will, kill Dorsets if they are already trained sheep killers, but the Dorsets put up a very

hard fight before surrendering, and it is certain that dogs would never learn sheep killing upon a Dorset flock. The wool of the Dorset sheep is quite thick, rather fine, very white and elastic, so that when well fitted

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The cow shown in this picture is now giving over 80 lbs. milk a day, and for the past week has averaged over 4 per cent. butter-fat. This means an average production of over 4 lbs. (80 per cent.) butter a day. She is one of nine cows and heifers that we have had officially tested within the past two months, every one of which has made over 20 lbs. butter in a week, the highest record thus far being 28.2 lbs. The time has never been when a similar statement could be made of any other herd in the world. In a good many respects Brookside Herd is in the lead, and has been for a number of years. Records made in official test are the best proof of quality; we are having our cattle

officially tested almost continuously, so the buyer from Brookside Herd stands a good chance to have the value of his purchase multiplied several times by the later records of animals closely related.

Write us just what you want, and let us tell you more about our herd and the cattle we have to offer.

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FARM AT LACONA AND LIVERPOOL (NEAR SYRACUSE)

BLOODED STOCK for January.

specimens are clipped into shape for the fall shows, they present a very even surface, and the hand pressed upon the wool leaves no imprint.

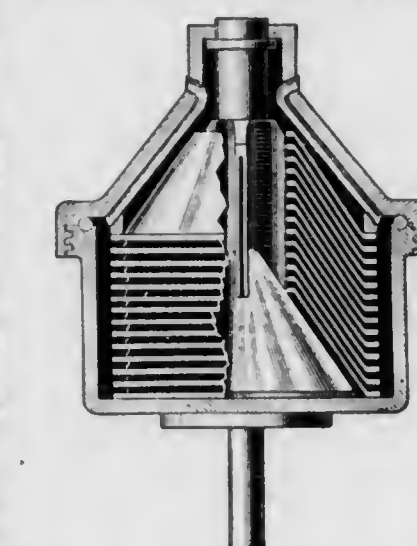
Well-bred Dorsets shear about with the Shropshires, hardly heavier, and the wool commands as good a price as any of the English breeds. But the distinguishing characteristic of the Dorset, the one thing that has caused it to be perpetuated as a race, and hold its own against all comers, even to quite largely displace other breeds in parts of England and our own country, is the ability of the Dorset ewes to conceive and drop their lambs at an early season, and by their great milking powers to push them rapidly forward to very early maturity. In England it is not uncommon to have Dorset Horns on Smithfield market at Christmas time, when they bring long prices. They will, if properly treated, lamb in September, and from that time onward until spring, although well managed Dorset flocks seldom wean at a later season than February. Dorsets will, if not restrained, drop two crops of lambs in a year. This, however, is not a good practice, and is not permitted by practical shepherds, seeing that one crop would be born out of season and the next one injured by reason of the drain upon the ewe in nourishing the untimely lamb. It is found more profitable to rear one lamb crop at the right time than two, says J. E. Wing in American Stockman.

Dorsets in America have one proud distinction; their breeders here have been able to breed as high a class of sheep as have been produced in England, if not better, whereas among the Down breeders it has been found necessary to make frequent importations to maintain flocks in the highest excellence. This has not been found necessary with Dorsets. The Dorset has been a favorite breed in America among producers of "hot house" lambs. Both Dorset rams for cross breeding have been used and Dorset ewes coupled with Dorset rams and what is probably best of all, the grade Dorset ewe coupled with a good "Down" ram, this last producing undoubtedly the winter or "hot house" lambs of the greatest possible merit.

Dorsets have proved hearty nearly all over the Union, and have been profitable wherever tried, providing the management has been sufficiently careful to keep them free from internal parasites. It is not probable that they are more subject to these destroyers than the "Downs" or other English breeds, nor is it especially difficult to prevent the ravages of these pests, but unless the required amount of care and forethought can be given, no man should attempt to breed Dorsets, or any other of the English breeds.

Dorsets for cross breeding have proved extremely valuable. The use of the Dorset ram upon the Merino ewes has given cross bred ewes that rival in point of general utility the pure-bred Dorsets themselves. In fact, with the ordinary shepherd the cross bred ewe of this cross will prove more profitable in the market flock than the pure Dorset herself, being nearly as good mothers, weaning quite as early, shearing well, and being a more sure breeder than the

THE "DISC" SYSTEM OF CREAM SEPARATION



Judging outward appearances alone, it might be reasonably assumed that one cream separator is as good as another. However, as the outside of the machine does not do the separating, we must look deeper for the real merits of the separator. Upon the construction of the gearing depends durability and operating ease which, of course, should be carefully examined, but the really important feature is the construction of the bowl. That is what does the work be it good or bad. Exhaustive tests have proven that the best results can only be obtained when the separator bowl contains a series of conical shaped, im-

perforated discs, dividing the milk into strata or thin layers. Bowls which do not contain discs of this particular kind do fairly good work with warm milk and by running a thin cream, but where a heavy cream is desired, or cold or thick milk is to be separated, as frequently happens in farm use, these separators lose a big percentage of the butter fat and consequently the profits. The original "disc" system as today used exclusively in building the DE LAVAL cream separators, is just as important to the separator as the guards are to the sickle bar of a mowing machine. The DE LAVAL "disc" system assisted by the "split-wing" device, both of which are patented and used only by the DE LAVAL Company, has in thousands of tests proven far superior to any other style of bowl construction. Other manufacturers have tried to imitate the DE LAVAL bowl but have never anywhere near equalled its efficiency. That is why over 98 per cent. of the world's creameries today use nothing but DE LAVAL machines. Creamerymen know that the DE LAVAL bowl is the only one which will secure all the milk profits. This fact should mean much to every dairy farmer who intends buying a separator. A De Laval catalogue which explains separator bowl construction in detail is sent free on request. Write today.

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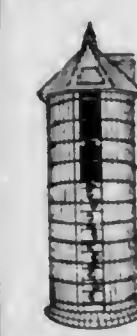
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pure bred Dorsets under American conditions. In fact, ewes of this cross have proved, in the writer's experience, the most profitable sheep he has ever had to do with.

The objections to the Dorset Horn as a sheep for the general farm are, first, the horns upon the rams, which sometimes give trouble, then the fact that the rams, if not fed off at an early age, develop a horn that is somewhat objectionable in the market, and next that Dorset lambs fed to an age of ten months will often attain a weight of 165 pounds or more, which is entirely beyond the requirements of the market of today. So that the Dorset is placed by its nature and adaption closely within the field of the producer, for very young fat lambs preferably at an early season.

The origin of many diseases among horses can be traced directly to filthy stables. It is therefore good economy to keep the stables scrupulously clean.

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THE MARES SELECTED FOR THE VERMONT EXPERIMENTAL BREEDING PROJECT.

In a bulletin issued by the Bureau of Animal Industry, United States Department of Agriculture, giving the present status of the experiment in breeding Morgan horses at the Vermont Experiment Station, near Burlington, the following appears regarding the nine mares and two fillies selected as a foundation for the stud: They are uniform in type, with full made bodies, fine heads and necks, full hind quarters, good legs and feet, and abundant quality. Seven mares and the two fillies were purchased in Vermont and two mares in Kentucky. Those bought in Vermont are by such sires as General Gates, Bob Morgan, Young Ethan Allen (a full brother in blood of Daniel Lambert), Denning Allen, Rocky Mountain, and Gillig. The Kentucky mares are by Harrison Chief, out of Morgan mares, and are in foal to the saddle stallion Highland Denmark, a horse of splendid conformation and quality and an excellent stock getter. Some of the Vermont mares were in foal at the time of purchase. Those not in foal will be bred to the Morgan stallions General Gates, Frank Allen and Rex. A stallion will not be purchased at present, as sufficient funds are not available. The introduction of Harrison Chief and other saddle blood was thought desirable on account of the great effect the blood has had on the quality of the harness horses for which Kentucky is famous. These mares were bought

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Get a better harness, made like you want it, and save money. Made of best oak-tanned, selected leather. Return at our expense, if not satisfactory, and get your money. Our illustrated catalog No. 1 with price list will surprise you. Sent free. Write to The King Harness Co., 19 LAKE ST., OWEGO, TIOGA CO., N.Y.

by a board composed of Prof. C. F. Curtiss, Director of the Iowa Experiment Station; Mr. Cassius Peck, of the Vermont Experiment Station, and Mr. George M. Rommel, Animal Husbandman, of the Bureau of Animal Industry. In addition to the characteristics mentioned above, the board insisted on pure trotting action and discriminated sharply against pacing or any tendency to mix in gaits. Pacing strains in the pedigrees were also avoided as far as possible.

Mares of the type described as having been selected cannot be but extra good individuals and they should, if mated with sires of the same class, produce the class of foals wanted. It will not be surprising, however, if the produce of the mares in foal to Highland Denmark show a disposition to pace, and if that gait is to be tabooed by the experimenters, they will hardly be regarded as desirable to keep for breeding. The fine finish which characterizes the Denmarks should make the fillies from Highland Denmark very desirable in case the pacing gait does not crop out.

Line Lukens' Poland-China Sale.

Any breeder of any breed of hogs would have enjoyed and surely would have been benefited by seeing the fifty-three head of Poland-Chinas driven through the sale ring on December 13, at Mr. Lukens' sale, for it was like a Poland-China show at a state fair. He offered the best lot of hogs he ever sold and the best bunch the writer ever saw sold at one sale by one breeder. He not only made a record for quality, but he made a record for a sow sale, for the fifty-one sows averaged \$318.23, while the entire offering of fifty-three head sold for \$16,230, making an average of \$306 per head. It was a sale of quality, blood and an exclusive breeders' sale, as the entire offering went to breeders, and some went to breeders from Ohio, Illinois, Iowa, Wisconsin, Kansas, Michigan and Indiana. The sows bred to Spellbinder averaged nearly \$500, while sows bred to Chief Perfection 2d came second, and sows bred to Corrector 2d, third. There were four head that sold over the \$1,000 mark and eight over the \$400 notch. The four high priced sows were No. 1, by Perfection B. L. sold for \$1,075, going to J. T. Ridgeway, Hillsboro, Ohio; No. 56, by Keep On, \$1,130, going to J. M. Klever, Bloomington, Ohio. She was surely one of the greatest finished sows ever sold. She was in pig to Spellbinder. No. 30, by Corrector 2d, sold for \$1,225, and sow Sis Hopkins, by Chief Perfection 2d, sold for \$1,500, going to R. R. Stafford, Minerva, Ill. The sale was well managed, and good hard work was done by Correll, McCracken, Travis and Foster. The following are the fifty-three head sold:

No.	Name	Price
1	J. T. Ridgeway, O.	\$1,075 00
2	R. M. Scott, Ind.	235 00
3	A. E. Marvin, Ind.	250 00
4	C. N. Sutter, Minerva, Ill.	250 00
5	T. P. Sheepy, Hume, Mo.	200 00
6	Goodrich Stock Farm, Mo.	330 00
7	Tom Hunter, Ohio	490 00
8	C. R. Smith, Ohio	280 00
9	Louch, Barnett & Son, Ill.	215 00
10	Jno. McCullough, Ohio	230 00
11	Claude Wilkinson, Ind.	185 00
12	Oaklawn Ranch, Ind.	200 00
13	Ira Garrison, Ill.	225 00
14	H. J. Hammerling, Ia.	225 00
15	Jno. Salmon, Ohio	215 00
16	Alvin Marvin, Ind.	360 00
17	J. B. Gerhart, Ohio	620 00
18	O. A. Jewett, Ill.	235 00
19	Frank Garrison, Ind.	360 00
20	W. E. Garrett, Ill.	200 00
21	Fred Scotter, Ind.	140 00
22	Hanson, Black & Gaffey	155 00
23	Louch, Barnett & Son	200 00
24	Matthew Bros. & Hurford	130 00
25	R. R. Stafford, Ill.	122 50
26	F. M. Scott, Ind.	245 00
27	F. L. Heininger, Ill.	230 00
28	B. F. Reed, Ind.	250 00
29	F. L. Heininger, Ill.	105 00

BLOODED STOCK for January.

35—W. O. Canaday, Ind.	180 00
36—Frank A. Nelson, Ind.	115 00
37—M. A. Deere, Ind.	280 00
38—S. H. Kaylor, Macon Ind.	265 00
40—Cotta & Mathis, Ill.	400 00
41—Matthews Bros. & Hufford	260 00
42—F. L. Heininger, Ill.	160 00
45—W. A. Prevett, Kans.	170 00
49—Dickerson & Dickerson	135 00
50—Gus. Aaron, Kans.	155 00
51—Harry Spurling, Ind.	300 00
52—W. J. Beeson & Son	300 00
53—Leeman Bros., Ill.	200 00
56—J. M. Klever, Ohio	1,130 00
57—W. J. Honeyman, Kans.	350 00
147—Frank Fltes, Ind.	155 00
100—Frank Fltes, Ind.	100 00
181—Frank Fltes, Ind.	50 00
101—Ira Garreston, Ind.	105 00
Sis Hopkins, R. R. Stafford	1,500 00

This was the high price of the sale; she was not in the catalogue but as breeders requested her sold, she was offered the last animal of the sale.

BOARS.

12—Walt G. Ayers, Ind. \$90 00

47—John A. Hoffman, Mich. 70 00

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BLOODED STOCK for January.

A Common-Sense Talk On Manure Spreaders

I. H. C. Corn King and Cloverleaf Spreaders



THERE'S no doubt that the right kind of manure spreader is a good thing for you to have. It is probably true that there is no other farm machine that, if right-ly chosen, is as valuable to the farmer. If manure is spread properly and at the right time, its money value far exceeds what you're apt to think.

But when you buy a manure spreader have a care. There are many of them on the market, and many with various "special features"—fancy affairs that do them more harm than good.

When you buy a spreader look out for these things—and avoid them. What is chiefly to be desired is strength and simplicity of construction.

Strength is essential because a manure spreader has to carry a heavy load and the rear end—the machine end—has hard work to do.

Simplicity of construction lessens the chance of the machine getting out of order and gives light draft. You know there are a good many manure spreaders that don't get out of the shed after the first year. They break and make too much trouble and cause too much delay.

INTERNATIONAL HARVESTOR COMPANY OF AMERICA, Chicago, U. S. A.
(INCORPORATED)

SILAGE FOR DAIRY COWS.

How much silage should I feed to my cows and what is the best feed to go with it? Is it best to feed it twice daily or only once? Should it be given before or after milking? I am about to feed ensilage for the first time.

Begin by not feeding over ten pounds of silage at a feed and increase the allowance as the cows get used to it and respond at the pail. Some cows will eat forty to fifty pounds of silage daily and do well, others will begin to lay on flesh under such heavy feeding and should have less ensilage and more grain feed of a protein character. Thirty to thirty-five pounds daily in two feeds will be about the average amount for a herd of cows. If they will eat more, however, and not get fat, give it to them, because it is the cheapest feed you can provide.

Good food to give with silage is clover or alfalfa hay, wheat bran, oat and pea meal, a little oil meal, gluten meal and cotton seed meal. These feeds are all rich in protein and balance up the silage which is rich in carbohydrates—a heat and fat forming element. Thirty pounds of silage with eight to ten pounds of grain, consisting of five or six pounds of bran, two or three pounds of oat meal, or oat and pea meal, with what clover hay the cows will eat, will produce good results.

It is best to feed after milking in

are strong and simple. The frame is carefully selected, well-seasoned lumber, and is strengthened by heavy cross sills and truss rods. They have steel wheels with staggered spokes, and both hind wheels have clutches. The box is made of selected stock and is securely fastened to the frame by heavy steel cleats. Corners are re-enforced with steel plates. Everything is of the very best.

Both of the rear wheels are drivers, and insure plenty of power. A large sprocket with heavy chain drive transmits the power to the cylinder. The cylinder is large and strong, and the square teeth (extra long) are made of the best high carbon steel.

The power for driving the apron is applied on both sides, giving an even movement and making binding impossible. The rollers are attached to the under side of the slats instead of to the frame.

The vibrating rake is a most important feature, and is found only on Corn King and Cloverleaf spreaders. It levels the load and brings the manure squarely up to the cylinder—a thing which is absolutely essential to

proper spreading. The teeth on the vibrating rake are held in place by coiled steel springs so they never break but adjust themselves to the size of the load.

And as a result of simple construction, the operation is simple. Any one who can drive a wagon can operate an I. H. C. spreader, for one lever does it all. There are ten feeds, ranging from ten to thirty loads per acre. The apron stops of its own accord when the load is all fed out. By reversing the lever it returns and again stops when back in position. No need to watch it at all.

These are some of the reasons why you should investigate I. H. C. Corn King and Cloverleaf spreaders before you buy. There are many other good points about them that are explained in our catalogues. There are two kinds—Cloverleaf, an Endless Apron machine, and Corn King, a Return Apron machine; each made in three sizes.

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The best by 53 years' test, 120 acres, 50 in hardy roses, none better grown, 44 greenhouses of Pinks, Ferns, Fleurs, Geraniums, Everblooming Roses and other things too numerous to mention. Seeds, Plants, Roses, Etc., by mail, postpaid, safe arrival and satisfaction guaranteed. Larger by express or freight. You will be interested in our extraordinary cheap offers of over half a hundred choice collections in Seeds, Plants, Roses, Trees, Etc. Elegant 168-page Catalogue FREE. Send for it today and see what values we give for a little money. **THE STORRS & HARRISON CO., Box 528, PAINESVILLE, OHIO.**

cali, and puts the bucket of warm milk to the calf's nose so as to touch it and in a minute or two it will drink, and the work is done. The calf has now learned to drink like other animals, and all trouble of feeding milk to calves is over. The mistake usually made is in allowing young calves to run with the cow several days, and so it has learned to suck, and it is hard to teach it any other way.

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Upon. Means Money for You.

James M. McCamat, New London, Pa., is advertising Guernseys in this issue, representing the blood of Lilly Ella, the champion Guernsey butter cow. If you are in need of something in this line write Mr. McCamat at once, or what is better, go and see for yourself.

Barred Plymouth Rocks is the farmer's ideal chicken and at this time of the year every farmer should be looking up new blood. **Herman Shockey**, Sand Patch, Pa., is advertising his famous Barred Plymouth Rocks in this issue. Write him at once for what you want.

Economy Silo Co., Frederick, Md., are advertising their silos in this issue. Now is the time to get posted on how to construct a silo and the cost. Don't leave this off, but send for their catalogue and specifications so that you can study the subject up in the evenings.

The International Harvesting Co. now have their catalogue on Harvesting Machines ready for distribution. You can obtain a great amount of valuable information from these catalogues and we would suggest that you write to them at No. 77 Monroe street, Chicago, Ill., and get these books. Tell them you saw this notice in Blooded Stock.

Do you want a fine picture of the greatest horse in the world? The International Stock Food Farm, Minneapolis, Minn., is offering a picture of Dan Patch to every one of our readers who answers their advertisement in this issue of Blooded Stock. Look it up at once and write them, stating you saw the advertisement in Blooded Stock, and ask for the picture, and get a good look at the great horse. Study how he is built and then pick your stock from the points you have gained by looking at the picture.

Inside Information About Tanning Hides for Coats and Robes.

Your Cow, Steer and Horse hides when converted into fur coats, robes and rugs are far better and cheaper than anything you can buy. There is no humbug about such goods. You know what they are when you furnish the material from which they are made. See the advertisement of The Crosby Fur Company, of Rochester, N. Y., in another column. These people—who are pioneers in this kind of work—are doing a large and ever increasing business in custom tanning, due to the fact that they not only understand their business, but treat their patrons right. See their advertisement in another column and if interested get their illustrated catalog.

HOG CHOLERA.

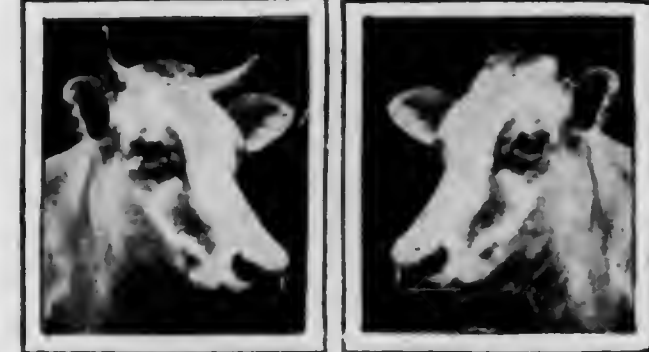
This very destructive disease is now prevailing in many parts of the country. There is great devastation in its path wherever it strikes. Many farmers are losing heavily. The Snoddy Remedy, to which the attention of the public has been often called in these columns, is saving numbers of herds throughout the country wherever it is used. However, a large per cent of the people is prejudiced against hog cholera cures, because of the bulletins being sent out over the country from the experiment stations telling the people there is no cure for it. Not-

withstanding this Dr. Snoddy, of the Dr. J. H. Snoddy Remedy Co., of Alton, Ill., is going right ahead curing the disease every day, besides hundreds of farmers who order the medicine and cure their own hogs. Dr. Snoddy is now in the State of New York curing a fine herd, and is called for by the breeders over ten or twelve different states and is kept busy treating the fine herds. Many of the most famous hog sales that have come off in the last few years could not have occurred had it not been for the Snoddy Remedy. In numbers of cases these hogs were down sick with the cholera only a few weeks before the sale date. When the Snoddy Remedy would be applied the hogs would be well in a few days and all right on the date of the sale.

It is the only remedy known that will stop the disease and restore the herd to thrift after they have gotten sick and began to die. It is also the greatest worm remedy and preventive of disease known. It keeps a hog in good condition, so there is no material danger of his taking the disease. It is the cheapest remedy now on the market because it puts the hog in a thrifty condition so they will make an extra gain from its effect which will return the farmer several times the cost of the medicine in this extra gain the hogs make from its effect.

Every farmer should have one of our Dr. Snoddy's free books. The little book tells all about it. Write the Dr. J. H. Snoddy Remedy Co., Alton, Ill., for one and it will be sent to you free by return mail.

The Dehorning of Cattle is a practice more or less known in every section of this country. It seems to have originated in the States of Iowa and Illinois about 1884 or 1885. Its spread can be traced by the efforts to crush it by the humane societies in a number



Before and After.

of legal proceedings, the decisions were in favor of the defendants and humanity yet against the S. P. C. A.

A number of the experiment stations have conducted exhaustive tests on dairy cattle by keeping exact records of the daily milk yield before and after dehorning. In a few instances the per cent of butter-fat was also noted at each milking. From these we can make a fair estimate of the effect of the operation on the dairy cow, and what holds good in her case will apply alike to the other breeds of horned animals. At the Wisconsin Experiment Station the animals went off 16 per cent, in the amount of milk the two milkings after the dehorning, and in a second test they went off 5 per cent, but in both cases increased in the per cent of the butter-fat and

made more butter-fat than before dehorning. At the Minnesota Station nine cows produced 7 per cent. less milk in three milkings after being dehorned and produced 3 per cent. less butter-fat in the same time, six cows of which had been kept where they could see the excitement and smell of the blood lost 3 per cent. in their total butter-fat in the same time, showing the slight loss of the dehorned cows was due partially to excitement. A number of the other stations have shown about the same results. In conducting these experiments the appliances for doing the work was thoroughly tested; the saw and all of the several dehorning instruments were tried, and in each case the Keystone Clippers were recommended as the quickest, smoothest cutting, most durable, strongest, and left the head in the best possible condition for rapid healing. It is the only dehorning instrument endorsed by the Experiment Stations. Write N. T. Phillips, Pomeroy, Pa., for his free booklet on dehorning facts.

Mr. David L. Taylor announces his resignation as Vice-President of Lord & Thomas, and his purchase of holdings in stock and acceptance of a Vice-Presidency in The Long-Critchfield Corporation. The consolidation of his business with that of the Long-Critchfield Corporation is an agency alliance of greater importance, perhaps, than

Chester Whites

Fall pigs, either sex. 2 choice spring Sows, one May Sow. Also a few white Plymouth Rocks.

JOS. T. FLEMING, R. 2, Belleville, Pa.

Aldoro Farm, Rosston, Pa.

Guernsey Cattle, Berkshire and Large Yorkshire Swine



We offer some splendid boars at \$20, \$25 and \$30 each. These are royally bred and ready for service. We have August and September pigs in pairs and trios not akin from the very best stock, and of the correct type. Pigs sired by Baron Duke 63d, Prince Premier, Paymaster, Pastmaster 3d, Sterling of Biltmore, King Hunter and other noted sires.

Let Me Quote You **A Price** ON TIME (We Pay the Freight) On The **AMERICAN Manure Spreader**

We will send you the famous American Manure Spreader direct from our factory, because we've stopped selling this celebrated machine through jobbers and dealers. You save their profits now. You get the wholesale factory price on the best Spreader made—not a "cheap" Spreader, but the best one in the market.

I Don't ASK You to Send Cash
as we send you the American and you pay us on easy, liberal terms—letting the Spreader really pay for itself as it earns for you—after you've tried it free. You now get the American, recognized as by far the best Spreader, for no more than you must pay for an ordinary Spreader. It is the

Lightest Draft Spreader Made
That saves your horses. The machinery works only when you start it in your fields—is at rest as you drive out. That saves wear and tear on the Spreader. And you ought to use a *Manure Spreader*. An American Manure Spreader will make your manure cover more ground, your crops grow more crops, your crops bring more money, and it will make your land worth more dollars per acre. The American has 40 per cent more exclusive features than any other Spreader. I want to tell you about



these practical exclusive features which make the American the only Spreader for you to buy at any price. The American is the Standard of the world. We allow

30 Days' FREE Trial
on every American Spreader made. We want every customer to see and try an American Spreader. We want every customer satisfied and to prove that our spreader is just as represented, therefore we say

Test It In Your Own Fields
If it is not just as represented you can return it. We pay all freight—BOTH ways—trial being FREE. My low price is for the American Manure Spreader delivered at your station—freight paid—including free trial—giving you the dealer's and jobber's profits, and—

If Satisfied—Take Your Time Paying
for your American Manure Spreader. Now, I want you to know my new low price and I want you to know all about the American Spreader.

Write Today for My Price
and I'll send it promptly. Also my free catalogue and booklet, which tell you all about the American Spreader, and Fertilizing. You'll be interested in both. You'll be glad you wrote. A postal will do. Don't buy until you investigate this. Take your time investigating, but—WRITE TODAY.

W. W. Collier, Gen. Manager
American Harrow Co., 3145 Hastings St., Detroit, Mich.

any change that has been made in the advertising field in recent years.

Mr. Taylor has had, for a number of years, a large clientele of customers who have become wedded to his idea of Selling-Plan Copy. A striking indication of the esteem in which Mr. Taylor is held personally, and the value his clients place upon his services is given by the fact that he retains every non-conflicting account he handled, transferring them without exception, to his new agency.

These accounts comprise some of the largest and best-known advertising agencies in the country in General Publicity, Mail Order, and Agricultural Lines. Commenting upon his affiliation with the Long-Critchfield Corporation Mr. Taylor said:

"The business I am handling had grown to such a volume that I felt, in justice to my clients as well as to myself, I must make an alliance which would enable me to give my advertisers the best possible service, especially in that close, personal, and systematic attention to detail—the thousand and one little things—upon which the success of an advertising campaign so largely depends.

"I am pretty familiar with the 'ins and outs' of most advertising agencies in America—I know their personnel—their methods—their standing and reputation, and, though large interests in several well-known agencies were offered me, I decided that my clients' interests would be best served by the Long-Critchfield Corporation.

"While I knew that originally the Long-Critchfield Corporation worked along special lines, yet I have, for several years, been watching with keen interest, their growth in the general field, and I knew that yearly they were increasing their already large volume of general business. I knew this increase was the result of sane, convincing, knowledge of media gained from the actual results of a varied line of advertising—and I cannot do other than congratulate myself, as well as my clients, upon the combination that has been effected."

Mr. Taylor becomes a vice-president and one of the managing directors of the Long-Critchfield Corporation. He will devote his attention largely to general publicity and mail-order advertising, the lines in which he has been so eminently successful.

He has originated and carried to a successful issue many of the most striking advertising campaigns of recent years, and has built up a personal clientele that is probably not equalled by any other advertising man in the country.

Send us your subscription at once.

Cures Obsolete Cases of Blood Spavin.
Dragonville, Va., Mar. 20, 1906.

Dear Sirs: I wish to express my gratitude for the Treatise that you sent me more than a year ago. I wrote to you about a colt that had blood spavin. It was an obstinate case, but December 26, 1904, I began treating with Kendall's Spavin Cure. I had to blister twice. It took about ten weeks to make a cure. I used four bottles of the Spavin Cure. It has been more than twelve months since the colt was cured but none of the puff has showed any sign of returning. I think the medicines are all that you claim and I recommend them to all who have lame horses.

Yours truly,
Andrew Revere.

Mention Blooded Stock when writing.

Cutaway Tools for Large Hay Crops

Three of Clark's Intense Cultivators produced this year 14 1-2 acres, 102 tons of well dried Alfalfa, Timothy & Redtop hay. If you want to know how



Read our program on page 3 for 1907 and send in your subscription at once.



Hood Farm Rex, the great prize winning boar of 1905 and 1906, owned at Hood Farm, Lowell, Mass. This animal weighs 1100 pounds when in show condition. He was a phenomenal winner and attracted great attention at the shows in 1905 and in 1906. He was champion at the great Indiana State Fair. His get were also phenomenal prize winners last fall. The Hood Farm Berkshires have been the greatest winners at the largest fairs during the last three years. In the center of the hog country last fall they were shown in competition with the best stock that the west could produce, and carried off a majority of the prizes. The Hood Farm herd is the largest herd of registered Berkshires in America.



The International Live Stock Exposition and the Holiday demand for prime beef cattle have been important factors in the trade of the past month. Perhaps the most outstanding feature of the month's market, if not for the entire year, was the sale by Clay, Robinson & Co. of the Grand Champion carload of International Cattle, fed and shown by the Funk Brothers Seed Company of Bloomington, Ill., at \$17.00 per cwt., the highest price ever paid at Chicago for a carload of cattle. Up to this time \$15.50, obtained by the above named commission firm for the Kerrick Grand Champions of 1900 had stood at high-water mark, but now they have beat their own record by \$1.50 per cwt. Last year the Grand Champion carload, which was NOT sold by Clay, Robinson & Co., brought only \$8.65, the general market at that time being not notably different from this year when nearly double that figure was obtained.

Receipts of cattle for the year show a decrease of 81,000 from last year, but this is practically made up by a gain of 32,000 in calves. The trade has good healthy tone at the present time, and now that the Holidays are past there will be more beef and less poultry eaten, so we may reasonably look for an improved demand and stiffening prices for well-finished fed cattle. As regards stockers and feeders we are inclined to think that we shall see a higher range of values from now on, in fact for some time past we have been advising our customers to place their orders on file with us so we could watch our opportunities to fill same on the temporary breaks and down turns which have been of frequent occurrence, and we still believe that persons wanting cattle to stock or feed will do well to send in their orders as soon as possible, as there is certainly nothing to be gained by waiting longer.

Hog receipts for the year 1906 will fall short nearly a half million from preceding year. This estimate takes into consideration hogs received direct to down-town packers as well as official receipts at the Union Stock Yards. Notwithstanding, hog raisers have received for their marketings at Chicago during 1906 over fifteen million dollars more than in

1905. Evidently there ought to be prosperity among the hog men anyway. Hog prices have not averaged as high since 1902, and with the single exception of that year, have been the highest on record. The average price for the year will figure somewhere around \$6.30, or fully \$1.00 per cwt. higher than last year. It will be remembered that the year opened with a \$5.30 to \$5.40 hog market, but prices have been practically on a basis of six cents or better during the greater part of the year, and the year closed with a range of \$6.00 to \$6.50. The \$7.00 mark has been reached during the past few months, but prices could not be maintained at that standard. Nevertheless, shippers have nothing to complain of. Average weight of the hogs this year was four pounds heavier than last. They averaged heaviest in September (248 lbs.) and lightest in February (215 lbs.). The outlook for a continued good market is eminently satisfactory, in fact we anticipate gradually stiffening values, but to what point neither we nor anyone else can say. Receipts are moderate, fresh meat demand excellent, and with a strong active provision market, and packers' stocks of pork, lard, sides, etc., lighter by far than usual at this season the situation certainly favors the man with the hogs. Nevertheless, reactions are bound to come, hence it is the part of prudence and good business judgment for anyone having hogs that are ready for market to send them along, taking their profits at present good prices, rather than to speculate on the chance of further advances which may and may not materialize, although as already stated, the present situation favors a strengthening rather than a declining market.

Receipts of sheep and lambs have gained about 70,000 over last year. It has been a sheepman's year right through and plenty of money has been made by feeders. While the market at times has sustained hard jolts under overly heavy receipts it has been quick to recover, as a rule, evidencing a strong undertone. More mutton is being eaten than ever before, and with steadily improving quality as better breeding and feeding methods are followed it is bound to increase in popularity. Mutton

and wool have both sold well this year and the sheepman has profited on both ends of his deal. The industry is on a sound basis, and we believe that the right sort of feeders, handled in the right way, will, during the coming months, return a good profit on the investment.

The first annual meeting of the American and Delaine-Merino Record Association will be held at the Great Southern Hotel at Columbus, Ohio, January 17th, 1907.

The event promises to be one of unusual interest and the large membership of this progressive association are looking forward with much pleasure to the occasion. There will be three sessions, the opening to be held at 10 o'clock in the morning. It will be devoted exclusively to the business of the association, and all members are urged to be present. The afternoon and evening sessions will be given to addresses by eminent men from different parts of the country.

All of the sessions will be held in the Assembly Hall of the Great Southern. The management of the hotel has accorded special rates to all persons attending and the committee has perfected plans for their convenience and entertainment.

All of those interested in thoroughbred stock are cordially invited to attend this meeting. While ample arrangements for all is presumed to have been made, it is desired that application for rooms be sent in early.

S. M. Cleaver, Secretary,
Delaware, Ohio.

Have You Money TO INVEST

The company that publishes Blooded Stock is growing faster than it has capital and to increase the facilities they are offering investors capital stock of the company at par.

This stock will draw interest. For further information address,
BLOODED STOCK
Oxford, Pa.



DAN PATCH 1:55

LITHOGRAPHED IN 6
BRILLIANT COLORS

MAILED FREE

WITH
POSTAGE PREPAID.

We Have A Beautiful, Six Color Lithograph of Our World Champion Stallion Dan Patch 1:55, which is 18 by 22 inches. Mr. Savage Guarantees That This Lithograph Was Made From A Photograph Taken By Our Own Artist at The Minnesota State Fair And Shows Dan Hitched To Sulky And Facing His Fastest Mile. This Remarkable Colored Lithograph Gives All Of The World Records Held By Dan And A Statement of His 43 Miles in 2:01 1/2 to 1:55. This is A Splendid Horse Picture For Framing. It is The Most Life Like Speed Picture Ever Taken And Shows Dan Flying Through The Air With Every Foot Off Of The Ground. The Greatly Reduced Pen Drawing, In This Offer, Is A Correct And True Picture of Dan Patch In Motion. The Lithograph Offered Could Not Be Duplicated, In Small Numbers, For \$2.00 Per Copy. Every Admirer Of A World's Champion Horse Can Have One Free. We Will Mail You One Copy Free, Postage Prepaid, If You Write Us And State How Much Live Stock You Own And Name This Paper.

Cash Capital paid in \$2,000,000.

INTERNATIONAL STOCK FOOD CO., Minneapolis, Minnesota, U. S. A.

Bear in mind, as heretofore announced, the Indiana State Dairy Association will be held in Indianapolis, January 30 and 31. The secretary is H. J. Fidler of Purdue University, Lafayette, Indiana.

Always mention Blooded Stock when writing advertisers.

LEARN VETERINARY DENTISTRY and make \$2000 a year. We teach you at home in three months of your spare time by illustrated lectures and grant diploma with degree. Cash basis free. The National Veterinary Dental College, Chicago, Mich.

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent, or exchange, poultry, supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants and vegetables. The cost of advertising is

Only Two Cents a Word, all classified. Each initial or number counted as one word. No advertisement taken for less than 25 cents each issue. All replies must be sent direct to advertisers. Cash covering the exact number of words at 2 cents each must be sent with every order.

This Department for Live Stock Only.

CATTLE.

JERSEYS—Combination and Golden Lad. For sale—10 cows, 10 heifers and 20 bulls. S. E. NIVIN, Landenberg, Pa.

HOGS.

Registered Duroc Pigs for sale. WALTER M. CARROLL, Box 106, Lynchburg, Va.

GET SOME Improved Large Yorkshire Pigs. Hundreds are glad they have these pure breeds. Price low. Money back if not satisfied. Write now. HARRY B. BILLINGTON, Wells, Minn.

MISCELLANEOUS

JUMBO HOMERS for Squab Breeding \$1.00 per pair. Send for free book. PROVIDENCE SQUAB CO., Providence, R. I.

Send 10 Cents for Poultry and Stock paper 1 year. PEDIGREED STOCK, Saratoga, Indiana.

POULTRY

WHITE and BARRED Plymouth Rock fowls and Mammoth Bronze Turkeys. R. H. McFADIEEN, Oxford, Pa.

Bantams—America's Best Sebright, Japanese, Polish Cochins, Games. Send 2c. stamp for circular. A. A. FENN, Box 10, Delavan, Wis.

ANGORA GOATS.

Crossing the Angora bucks upon the common goats of the United States has been practiced since their introduction in many respects.

Many of the large flocks of Texas and New Mexico have had Mexican does for their foundation.

Building up a good mohair producing flock upon this plan requires five or six years.

The advantages are that the does with which the beginning is made are cheap, costing from \$1.50 to \$2.50 a head.

During the first and second crosses there are many twin kids, thus increasing the herd in that proportion—a condition not existing except to a small extent among the pure-bred Angoras; the size and hardiness of the progeny are increased and the liability to disease decreased.

Care should be exercised in starting a flock by this method to select only such does as are entirely white, for any other color, however slight, is objectionable.

If otherwise, the results might be satisfactory, but the probabilities would be the contrary.

In handling the crosses the breeder often finds that atavism becomes apparent when it is most objectionable.

For instance, the progeny for two generations of a doe having black spots might appear all that is desirable, while the third generation would produce the latent color.

It is also quite necessary that the common does should be of the short-haired variety.—American Stockman.

PRODUCTION OF MILK.

Now is a good time, says Prof. G. L. McKay, of the Iowa Agricultural College, for every dairy farmer to begin the study of a more economical production of milk. Here are some of the steps toward it:

1. Use of a registered dairy bull.
2. Weed out the poor cows.
3. Make the stables more sanitary and healthful.
4. Build a silo.
5. Grow more alfalfa.
6. Pay more attention to the rearing of first-class heifer calves.

Make the production of a really fine dairy cow a part of your regular business. 7. Install the farm separator and use the skim-milk in best condition.

A man that will do all these things in their best form will find a handsome margin of profit coming to him.

DO YOU WANT

CHESTER WHITES?

I have the kind that people buy, try breeding, then buy from somebody else, but after that they come back because the blood they secured from me still showed the best, because my stock was the best bred. Have some very good breeding stock for sale. Write me for what you want and tell me what I can do for you.

J. H. YARNALL, Jennersville, Pa.

Primrose Herd Large English Yorkshires.

From Imported Stock. Second to none. Write wants.

A. A. BRADLEY,
Frewsburg, N. Y.



Chester Whites

I have them combining the best blood in Chester County. If you want the good old Chester that has made this county famous, we have them here that will please you. We breed and sell only the best. Write me.

L. WEBSTER, Kelton, Pa.

Best in Years Poland Chinas

Ohio Sunshine 2nd, yearling boar. Good one March and April boars sired by O. S. 2nd, Standard Sunshine and Correction. March gilts by O. S. 2nd. Also bred sows later.

Registered Rams, large, smooth, heavy shearing. Write for prices, description and breeding to

W. H. CRESWELL
CEDARVILLE, O.

CHESTER WHITES AND POLAND-CHINAS.

20 choice Spring Sows, open; 25 Fall Pigs, both sexes, and also some very fine yearling bred sows that are extra fine and were prize winners last Fall. 12 head Poland-Chinas from 3 to 12 months old. I never had a better offering in young sows than this.

C. R. CRESSMAN,
Bursonville, Bucks Co., Pa.

Chester Whites

Sows bred, \$25 to \$30 each. Boars at \$15. Sows ready for service. Show stuff—what you want. Fancy fall pigs. Write at once.

D. W. SHELLABARGER, Enon, Ohio

See page 3 for Program and subscription offers for 1907.

Send in your renewals promptly.

See page 3 for Program and subscription offers for 1907.

ALFALFA MEAL AND WHEAT BRAN FOR DAIRY COWS.

Prof. Thomas I. Mairs, of the Pennsylvania State College Agricultural Experiment Station, in bulletin No. 80, makes a comparison of alfalfa meal and wheat bran for dairy cows, as follows:

1. The alfalfa meal contained 15.48 per cent. protein, the wheat bran contained 16.95 per cent. protein.

2. The results of this test do not warrant the recommendation of alfalfa meal as a substitute for wheat bran as a feed for dairy cows at the present market prices, for the following reasons:

(a) The alfalfa meal was less palatable, and resulted in a decreased milk production in every case.

(b) The alfalfa meal in central Pennsylvania costs approximately \$23 per ton, whereas good winter wheat bran could be had for \$20 per ton or less.

(c) Assuming the alfalfa meal to cost \$23 per ton, corn and cob meal \$20 per ton, wheat bran \$20 per ton and cottonseed meal \$28 per ton, the grain cost of one hundred pounds of milk when the cows were fed alfalfa meal was 47.1 cents, when fed wheat bran it was 45.3 cents.

3. Assuming alfalfa meal to cost no more than bran, viz., \$20 per ton, the former seemed to produce milk at the lower grain cost per 100 pound, viz., 44 cents, as compared with 45.3 cents on bran. On the basis of comparison, if wheat bran was worth \$20 per ton, alfalfa meal was worth \$21.28 per ton.

4. Ignoring the last period, however, during a part of which no silage was fed, the cost of the bran ration was 43.9 cents per hundred pounds of milk produced, as against 44 cents for alfalfa meal at the same price per ton.

THE GOOD JERSEY.

What She Is, What She Does and What She Needs.

The good Jersey is a treasure and deserves to be exceedingly well taken care of.

She is very susceptible to climatic changes, as affecting both her health and her milking.

She cannot be made hardy by being subjected to hardships.

She has been bred and fed away from the primary natural law of the survival of the physical fittest.

Her health and robustness of structure are sufficient only for her mission of milk-working.

She is not a hewer of wood or a drawer of water; no sister to the ox.

She knows nothing of the call of the wild.

She is thoroughly domestic, a lover of quiet life; her ways are ways of pleasantness and all her paths lead home.

She is not a bearer of men's burdens, but a purveyor of his comforts.

She is the optimist of the farm; she rejoices in and contributes to good living. Therefore, this good Jersey is a prize, a jewel.

She should not be exposed to the cold of nights or the rain and storm. Thought should be given to her supply of feed. She may be in the fall pasture-grass

up to her udder and come in grunting full, yet in fact be under-fed; and from her feed only can she retain her ability to give milk. No matter how full the feed may be in bulk, if it be lacking in balance, even such an expert as the Jersey cannot change it.

They used to tell us that the cow made her milk from protein only, but now they have modified that soberly. It has been found that there is a clear limit to the amount of protein she can use profitably; that, against the old teaching, it is surprising how much of the carbohydrates she can make into milk. I think the Jersey can use more of them than the less specialized breeds, hence her superiority as the farmer's dairy cow.

The good Jersey elaborates her milk from her body. Her tissue wastes can only be replaced by the food eaten, digested and assimilated. For this reason she needs as food, protein, carbohydrates and fat; these maintain her perfect bodily functions; from this properly nourished body she makes the perfect food—milk containing protein, carbohydrates and fat.

Manifestly, then, if the cow shall give, say, 5½ per cent. milk in a day and keep at it, her environment must suggest bodily comfort, with a minimum of physical, mechanical exertion; and her feed must be so balanced to the needs of her body that

BLOODED STOCK for January.

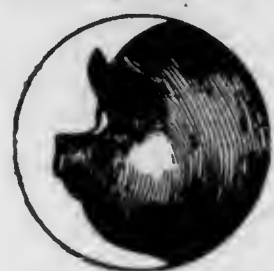
after she has nourished herself she may be able to find in the feed and extract from it all the elements she transmutes into the composition of forty pounds of rich milk.

At doing this remarkable work the good Jersey has no classmate.—W. F. McSparran in Jersey Bulletin.

Mention Blooded Stock when writing advertisers.

See page 3 for Program and subscription offers for 1907.

BLOOD WILL SELL



IN BERKSHIRES, I have a very fine young sow bred to ROYAL PREMIER KING and a superior lot of young males and females by

that sire, on all of which I can quote you attractive prices.

IN JERSEYS, I have young bulls, heifers and splendid calves. Prices low and qualities high.



W. F. McSPARRAN Furniss, Pa.

15 Angus Bulls

As good as the Best

Must sell to make room

They are of the Champion Bull, Prince Ito

blood that sold for

\$9100 at auction

MEYER & SON

Bridgeville, Del



MEYER & SON

OUR GUERNSEYS WON AT ST. LOUIS

Do You Want a Bull Calf?

Our Herd

Has Made

RECORDS

in the

Show Ring



Write for detailed description. Our prices are reasonable

ALDORO FARM, Rosston, Pa.

BLOODED STOCK for January.

HOG CHOLERA

The Problem of a Cure is now Solved

Dr. J. H. Snoddy, of Alton, Ill., has discovered a positive cure and preventive for this terrible disease. He has had it in use for ten years and has saved millions of dollars' worth of cholera hogs for the public. The directions for its use are simple and easy to follow. Any practical farmer can stop the worst outbreaks of cholera that ever come and save every hog that is able to take the treatment.

The following breeders and well known hog raisers have tried the remedy and recommend it highly. T. T. Schouler, Supt. City Home Farm, Worcester, Mass; J. E. Hendrickson, Commission Merchants, Philadelphia, Pa. and Dr. David Alkire, of Marco, Ind., and many others.

Dr. Snoddy has published a small booklet that gives full directions and tells all about it. This little booklet will be mailed free to every person who will write for it. Every farmer and hog raiser should write at once for one of these little booklets. They are free, Address

THE SNODDY REMEDY Co., Box 290, ALTON, ILL.

The Decline of Beef Cattle Breeding

We have often referred to the thousands of inferior scrub cattle coming to Chicago markets every day and cannot understand why the farmers do not buy and breed the pure-bred beef bulls to improve their cattle up to the better market price. There used to be an ignorant prejudice against fine stock, but certainly with all our fairs, stock shows, agricultural colleges, farmers' institutes and stock papers, everybody should know the merits of the improved breeds of cattle for good beef. But not half the farmers take any stock or agricultural papers. The cattle breeders have lost their courage and quit advertising, the farmers will not buy or breed the pure-bred bulls at any price, they are drifting along raising scrubs that do not pay for the high-priced feed they eat, and the farmers are raising less of these unprofitable scrub cattle; many who buy scrub feeders lose money and their feed too. It will take a mighty awakening to change this unnatural and unprofitable condition of the scrub cattle farmer throughout the middle west.

The Pittsburg Stockman tells us the same condition prevails in the eastern states.

For several years now breeders of pure-bred beef cattle have had more bulls than they could dispose of. At the same time the cattle coming to market have shown a deplorable lack of breeding. Last week a man who has been selling cattle on the market for many years remarked that he had never seen the average quality so inferior as it has been this year. He was not talking about flesh but quality. If the quality is present the lack of flesh is no bar to a good market, for feeder buyers are always willing to pay a reasonable price for something that is bred and shaped right. But a large proportion of the cattle marketed from the farms is not fit either to kill or to feed profitably unless bought at a low figure. This peculiar situation, a surplus of good bulls in breeders' hands, should be remedied. It is unprofitable to all concerned. But how can it be remedied?

Mr. Phillips sends free a handsome book in orange and black that discusses the subject thoroughly.

died? We don't know and invite opinions. The men who are raising scrubs seem to be out of reach of the influences that will cause them to make progress. They are not reading agricultural papers, they are not attending agricultural schools or institutes, they are not studying the market or the shows where they can find examples of good cattle. How are they to be reached in such a way as to induce them to make the improvement they must make if the cattle industry is profitable to them?—Live Stock Journal.

See page 3 for Program and subscription offers for 1907.

The Humane Way to Dehorn.

The humane instrument to use, manufactured by M. T. Phillips, Pomeroy, Pa., is the Keystone Dehorner. It is made in two designs—Improved and Regular style. Both are standard, the former being lighter in weight and of greater cutting power. It is built on the same principle as the regular Keystone.

The Keystone severs the horn "in a jiffy" with little pain. It leaves a clean, smooth stump that readily heals



with scarcely any discomfort to the animal. All over in a minute. No sawing, torn flesh, crushing or mangling of head. The cutting blades are of the finest steel specially tempered—keen and strong.

The Keystone is very popular at experiment stations.

Mr. Phillips sends free a handsome book in orange and black that discusses the subject thoroughly.

All trouble in kicking, rearing and stubbornness generally arises from improper handling or not sufficient handling to adapt them to usage.

It is not good policy to force the growth of colts by giving them stimulating foods and overfeeding them. The overgrown horse is seldom a durable one.

Mention Blooded Stock when writing advertisers.

Raise 1000 Pound Hogs

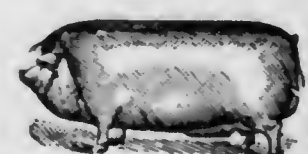
Why lose profits breeding and feeding scrub hogs? Two of our O. I. C. hogs weighed 280 lbs. We have headquarters for breeders. Will send sample pair of our famous

O. I. C. HOGS

on time, and give agency to first applicant. We are originators most extensive breeders and shippers of thoroughbred swine in the world. Write for circulars.

L. H. SILVER CO., 337 Canton, Cleveland, Ohio.

U. S. Government Inspected herd

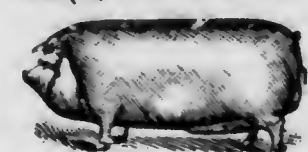


Chester Whites

For years I have been selecting and breeding to build up a herd that would be uniform in shape, stamping other herds with the good qualities that I had succeeded in fixing in my herd. If in need of first-class Chesters come and see me or write your wants. Only the best sold for breeders.

T. A. STEVENSON, Shannon City, Ia.

Bursonville, Bucks Co., Pa. GREENWOOD STOCK FARMS



Farmers and Breeders I now have a large stock, probably the best I ever owned, thoroughbred Poland-China and Chester White Pigs, 2 to 6 mos. old, sows bred, boars ready for service, all from prize winning stock. Guernsey and Jersey Cattle, Buff and Barred Plymouth R. Chickens.

Farms and Residence, Greenwood, Pa. Address C. H. DILDINE, Route No. 1, Rohrsburg, Pa.



The Secretaries Corner

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS.

From November 1 to December 5, 1906 Unless otherwise mentioned, these records are for a period of seven consecutive days. They are made under the careful supervision of State Agricultural Colleges and Experiment Stations, and their accuracy is vouched for by them; no private records are reported by the Holstein-Friesian Association.

During the period from November 1st to December 5th, 1906, records for 100 cows have been accepted; seven of which were begun more than eight months after freshening. All made seven-day, two made fourteen-day, and four made thirty-day records. The averages by ages were as follows:

Twenty-six full aged cows averaged: age, 6 years, 10 months, 8 days; days from calving, 16; milk, 414.9 lbs., per cent fat, 3.42; fat, 14.203 lbs. Six senior four-year-olds averaged: age, 4 years, 9 months, 14 days; days from calving, 23; milk, 425.2 lbs., per cent fat, 3.31; fat, 14.064 lbs. Four junior four-year-olds averaged: age, 4 years, 3 months, 10 days; days from calving, 11; milk, 389.2 lbs., per cent fat, 3.57; fat, 13.892 lbs. Nine senior three-year-olds averaged: age, 3 years, 8 months, 21 days; days from calving, 18; milk, 358.6 lbs., per cent fat, 3.54; fat, 12.721 lbs. Ten junior three-year-olds averaged: age, 3 years, 2 months, 8 days; days from calving, 17; milk, 351.0 lbs., per cent fat, 3.29; fat, 11.550 lbs. Fifteen senior two-year-olds averaged: age, 2 years, 9 months, 23 days; days from calving, 24; milk, 333.1 lbs., per cent fat, 3.21; fat, 10.676 lbs. Twenty-three junior two-year-olds averaged: age, 2 years, 23 days; days from calving, 39; milk, 272.1 lbs., per cent fat, 3.24; fat, 8.815 lbs.

This herd of 93 animals, of which over half were heifers with first and second calves, produced in seven consecutive days 32,830.8 lbs. milk, containing 1,101.353 lbs. butter-fat; showing an average of 3.35 per cent fat. The average yield for each animal was 353 lbs. milk, containing 11.842 lbs. of butter-fat; equivalent to 50 1-2 lbs. of 25 quarts milk per day, and 13.8 lbs. of best creamery butter per week. The larger part of these cows were tested just after coming into winter-quarters from the fields.

In this issue of the Official Reports, there is nothing which H.-F. men would consider remarkable for H.-F. cows; although the records are very creditable, as is shown by the general averages and the averages for the herd. Pontiac Tiranla, 17,959 lbs. fat from 512.3 lbs. milk in seven days and 69,799 lbs. fat from 2,237.6 lbs. milk in thirty days, and Carlotta G's Knoumit, 17,201 lbs. fat from 457.3 lbs. milk, lead the cows of full age, and Pontiac Almeda, 17,574 lbs. fat from 392.6 lbs. milk, the cows of the senior four-year class; while Paul Sadle Vale, 16,034 lbs. fat from 453.4 lbs. milk, and A & G Burke DeKol, 15,746 lbs. fat from 441.6 lbs. milk, are in the lead. Shady Brook Gerben Parthena 4th, 16,524 lbs. fat from 460.1 lbs. milk in seven days and 66,241 lbs. fat from 1,868.2 lbs. milk in thirty days, is far in the lead in the senior three-year

class; while Pontiac Pyrrha, 15,889 lbs. fat from 409.6 lbs. milk in seven days and 64,574 lbs. fat from 1,994.9 lbs. milk in thirty days, holds a relatively high place among the junior three-year-olds. In the senior two-year class, Dot Monarch DeKol Paul Vale, 14,658 lbs. fat from 377.1 lbs. milk, and Glenice Beauty's Baby 2nd, 13,753 lbs. fat from 435.5 lbs. milk, lead; while Pauline Fletertje Hengerveld DeKol, 12,016 lbs. fat from 285.7 lbs. milk, makes a fine showing among the juniors.

The records begun more than eight months from calving are worthy of careful notice. 256 days from freshening, and 148 days after the close of her 100-day record of 284.088 lbs. fat from 10,017 lbs. milk, DeKol Creamelle began her second official test, making 10,943 lbs. fat from 413.3 lbs. milk; and her owner writes this office that he expects her to make over 26,000 lbs. milk for the year. It will be noted with interest that she was bred July 11th, and that the time between calvings is not expected to exceed 14 months. May Durkje, Ethel Pride and Maud of Kent 4th also make very nice records. In the junior four-year class, the record of Johanna Bonheur, 10,761 lbs. fat from 292.6 lbs. milk, begun 262 days after calving, is very noteworthy; this cow was bred June 3rd. In the senior two-year class, Oxford Maud, with a record of 8,094 lbs. fat from 184.7 lbs. milk and begun 295 days after calving, will attract attention. As usual, the records begun more than eight months from calving show the staying powers of the breed, and what can be expected from Holstein-Friesian cows during long milking periods.

The twenty-fourth annual meeting of the Red Polled Cattle Club of America held its 10th annual meeting in Chicago, December 6th, 1906, the president in the chair.

The minutes of the last meeting as printed were approved. A total of 72 new members were enrolled during the year.

The Treasurer reported having paid out \$1570.42 in prize money awarded at the various live stock exhibitions and state fairs, and having a balance of \$10,044.82 on hand.

The club proceeded to elect by ballot four directors to serve two years,

to fill vacancies occurring at this meeting, as follows: P. G. Henderson, V. T. Mills, J. W. Martin, W. S. Hill.

Report of committees appointed last year to try and revive the Farmers' Cow class at the International and to consider the feasibility of a class for Red Polls at the American Royal, at Kansas City. Neither committee received satisfactory replies.

On motion of Prof. Price the board of directors be instructed to select a permanent jury of three men, for a term of three years, to select the services of one of three foreign judges for the International Exposition.

A resolution was offered by Mr. McKelvie requesting the board of directors, with the aid of the English people, to formulate a standard of excellence. On motion the club adjourned.

The board of directors were called to order and elected the following officers: P. G. Henderson, president; W. C. McKamy, vice-president; Harley A. Martin, secretary; Hon. S. A. Converse, treasurer; Roy H. Dosh, corresponding secretary.

On motion the president was authorized to secure the services of an attorney to take the necessary steps for renewal of charter, which expires in November, 1908. The other motions were that the president be authorized to communicate with Mr. Blofield to secure the services of one of three judges for the next International Exposition and report results to the board of directors; that the price of herd books be reduced to \$1.50 per volume; that the secretary be instructed to communicate with the secretary of Illinois State Board of Agriculture, asking for a class for milking Red Polls. The appropriations to fairs were allowed, as follows:

For steer classes at each of the three Texas Fairs—Ft. Worth, Dallas and San Antonio, \$50 each.....\$ 150
Ft. Worth, \$100; Dallas, \$200;
For Texas Fairs Breeding Classes



GRIDER'S FINE CATALOGUE 1907 tells all about pure-bred poultry and describes and illustrates 60 varieties, 10 beautiful natural color plates. Gives reasonable prices for stock and eggs; how to cure diseases, kill lice, make money. This valuable book only 10 cts. R. H. Grider, Rheems, Pa.

„BARRED PLYMOUTH ROCKS.“ THE RINGLET STRAIN

600 FINE BREEDING AND EXHIBITION BIRDS for sale at reasonable prices. My winnings at the Western Maryland show, held at Cumberland, February, 1906, is proof that my Rocks are of the best, winning in a strong competition of 125 birds in class.

Winnings—1st, 2nd and 3d Cockerel; 1st, 2nd and 3d Pullets; 1st and 2nd Hen; 1st and 3d Pen. Write your wants and I will quote you prices.

HERMAN SHOCKEY, R.D. 1, Sand Patch, Pa.



—Ft. Worth, \$100; Dallas, \$200;	
San Antonio, \$200.....	500
Fair at Winnipeg.....	75
Washington State Fair.....	100
Oregon State Fair.....	100
South Dakota State Fair.....	100
North Dakota State Fair.....	50
Hutchinson Kansas Fair.....	50
Mississippi Fair.....	50
Nebraska State Fair.....	100
Indiana State Fair.....	100
Montana State Fair.....	50
Louisiana State Fair.....	50
International Exposition.....	1000

Total.....\$2475
On motion of V. T. Hills, that if the Tennessee State Fair put up \$200 for Red Polls the club will appropriate \$100.

On motion of J. W. Martin, the appropriation to the Denver Fat Stock Show be left with the executive committee awaiting more definite information.

The board appointed a committee consisting of two breeders and one professor to act with an English representative to formulate a standard for Red Polls. J. W. Martin and W. D. McTavish were chosen as the two breeders and Prof. C. F. Curtiss was chosen as the professor for above committee.

The following committees were appointed: Executive—P. G. Henderson, V. T. Hills, W. C. McKamy; auditing—E. W. English, W. S. Turner, F. H. Hawley; editing—M. C. Ring, Chas. Graft, H. A. Martin.

H. A. Martin, Secretary.

PENNSYLVANIA DAIRY UNION

The plans for the forthcoming Convention of the Pennsylvania Dairy Union, January 22-25, 1907, at Harrisburg, Pa., have so far matured that we can say that the programme will include Governor Hoard, Chief Webster of the Dairy Division at Washington, or some representative of this department, and other men prominent in the different branches of the dairy work.

Prizes will be offered for exhibits of butter, cheese and probably milk.

Space has been secured for an exhibit of dairy machinery and apparatus, and correspondence indicates that the supply firms will make this an interesting and profitable feature of the convention. It is expected that milking machines in operation will be a feature of the exhibit.

The exhibit rooms are located close to the meeting room and easy of access, so that the exhibitors may be sure of getting the attention of those in attendance at the convention.

H. E. VanNorman, Pres.,
State College, Pa.



Speaking of purchasing Jersey Red pigs, brings up the question of who you will purchase from. One of first things to consider is the quality of the herd from which you are to get the new blood. Arthur J. Colmas, Moorestown, N. J., says that his Jersey sows are gold bonds and their litters the coupons which you convert into cash. He has stock of a superior quality and prices are low enough to make it a profitable investment for every customer who buys. A guarantee of safe arrival in good condition goes with every animal shipped and his reputation is back of every transaction, and he will be pleased to quote you prices on anything you want, from a single pig to as many as you need.

The Ohio Swine Breeders' Association annual institute will be held at Star Hotel, Columbus, Ohio, January 15, 1907, at 8 o'clock p. m. A first-class program has been arranged. All swine breeders and their friends are invited to be present.

Bulletin No. 79, of the Pennsylvania State College Agricultural Experiment Station, gives the following summary on Alfalfa:

Under favorable conditions alfalfa yields a most satisfactory crop for soiling or hay.

Alfalfa should be cut when coming into blossom; if the cutting is delayed until full bloom, the stalks become more woody and undesirable, and the succeeding growth starts more slowly.

Under average conditions from twenty to thirty pounds of seed should be sown per acre.

Summer and fall seeding following thorough tillage is recommended. Spring seeding is more likely to be choked out by weeds.

Deep, well-drained soils are best. Do not sow on wet land.

Alfalfa thrived in a compact, gravelly soil of good drainage quite as well as in a loose loam.

Alfalfa grew best where a heavy application of phosphoric acid and potash had been made.

Five tons of manure per acre gave

better results than the phosphoric acid and potash contained in five hundred pounds of good brand of commercial fertilizer.

Turkestan alfalfa did not equal in yield the common alfalfa.

Fall seeded alfalfa on dry land will withstand severe winters of this climate perfectly; in fact, better than the common red clover.

Where conditions were such as to give the plant a strong and vigorous start, nodules appeared on the roots. Where plants were weak and slow in starting to grow, few of them possessed nodules.

Lime has not given satisfactory results. In some instances it has given no appreciable results; in other cases it has been decidedly harmful; in no case was it applied to advantage.

In several instances the alfalfa withstood the first winter, but was completely winter-killed during the second. The larger growth seemed to give no assurance of the ability of the plants to withstand severe freezing if the soil is wet.

DUROCS of the Most Fashionable Breeding

Boars. Pigs and Sows



In pig to some of the greatest herd boars in the west. The quality is of the kind that will do the purchaser good. The prices are right. Our guarantee goes with every animal.

LESLIE D. KLINE,

Vaucluse, Va.

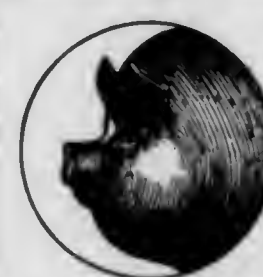
FOR SALE

Extra Fine This Fall

50 Poland-China Pigs 50

Sired by Ohio's noted hog Golden Rule, and out of splendid well bred matured sows. These pigs are extra fine and will be sold cheap if taken soon. Give me an order and see if I don't please. You can get winners for next years fair, and buying them small the express is light. Satisfaction Assured.

W. C. WELCH
Harveysburg, Warren Co., O.



STONE FARM BERKSHIRES

One Hundred Fall Pigs

Out of large prolific Sows, sired by Imported Lord Alton S. 64146, and sons of Masterpiece No. 77000, Lord Premier No. 50001, Baron Premier 3d 75021. Also offer twenty-five Yearling Sows, and thirty Spring Glts, bred to the above Boars for Spring farrowing. Five Yearling Service Boars and twenty Spring Service Boars. Also a few unbred Spring Glts. Orders filled promptly. We have over two hundred head to select from.

RICHARD H. STONE, Trumansburg, N. Y.

Hints Relative to the Management of Fall Litters

Many farmers and hog raisers believe the fall litters unprofitable, while others have very good success with the fall pigs, realizing almost as great a per cent. of profit from fall pigs as from their spring and summer pigs. We believe, if properly handled, the fall pigs do as well and are as profitable, all things considered, as earlier pigs, but it is necessary to have ample shelter for them during the cold storms of the fall and winter. And it is also necessary where two litters a year are raised by the same brood sow to have the spring litter come early in order that the sow may be bred again in time for the fall litters to be started before severe cold weather sets in. By breeding the sows for spring pigs which you intend to farrow a full litter the fall following they should be bred to farrow early in March and bred again in May for September farrow, says F. E. Rutter in Western Swine Breeder.

September pigs should have a dry shelter provided for them where they can take refuge from the wet and cold storms, and where they can sleep dry and warm during the cold, frosty nights of late fall and winter. Sows that farrow in the fall usually have stronger pigs and raise a larger per cent. of pigs farrowed than in the spring farrow for several reasons, but mainly because during the summer they have had a more nitrogenous feed and more exercise, and they are less likely to overlay them while quite small. A sow that has been properly fed and cared for until she is two years old, raising only one litter the second year, will be more prolific and a better breeder if thereafter she farrows and raises two litters each year until she gets

old and clumsy. She will consume but little more feed during the year and will have double the number of pigs to her credit amongst which to divide the cost of her keep during the year. But it seems I hear some say the cost per pound of pork raised is greater in raising fall pigs since they cannot, up here in the North, forage for their feed during the frozen winter months but must be fed what they consume, which adds to the expense. Granting that it does take more feed prepared for them during the winter, the value of your time in feeding and caring for them is not so much as during the busy season of summer when the farmer of necessity must attend to his growing crops, and harvest usually finds the pastures dried up and his hogs needing as much or more care than in the winter. And time is money, especially when one has to hire help to raise or harvest his crop. After breeding your sows that have raised spring litters and fall litters give them a good June grass and clover pasture until rape is large enough to turn them in. Feed a little slop of ground or mill feed each evening mixed in a thin slop and have them moderately gaining in flesh until farrowing time. When due to farrow provide a dry sheltered place to farrow in, where the air circulates freely, and is moderately cool. After farrowing let the sow pasture a few days without additional feed and then begin to feed a little mill feed in her drinking water, being careful to feed scant enough so the litter will take all the milk, and be careful not to increase the feed faster than the little pigs' capacity to take all the milk of their dam. Feed in low, shallow troughs and the

pigs will soon get their feet as well as their noses into it and begin to eat with her, and when they seem anxious for feed and want more than they get with their dam, a good plan is to have a creep hole in the fence into a pen where they can be fed separately, and when they are about six weeks or two months old reduce the sloppy feed of the dam, giving her dryer feed, and gradually dry her up while the pigs are still with her by increasing the dry grain ration so she will begin to take on flesh. She will come in heat and be bred again while the pigs are still unweaned. The pigs, by the time winter sets in, will be large enough to consume considerable roughage, second crop of clover run through the feed cutter and fed fine and mixed with shorts or mill feed for the morning and noon feed during the winter when the pigs cannot have pasture. Pigs eat it readily and thrive on it. Feed corn for the evening meal and let them have a roomy lot for exercise, but a warm, dry place to sleep during severe cold winter. This will prevent them from piling up, which causes them to steam, and when the cold wind strikes them it is chilly and very often is the cause of rheumatism. Feed them all the cut clover mixed with shorts or mill feed that they will eat up clean, and the fall pigs will thrive as well and make as rapid growth, provided they have dry, warm, comfortable housing, as the spring pigs in their pasture lot. Try this method of raising two litters of pigs a year instead of one, and give the fall pigs the attention necessary to make them thrifty, and you will find them equally as profitable as the early pigs.

See page 3 for Program and subscription offers for 1907.

Get rid of the surplus horses that are not growing into money. There is no advantage in keeping enough extra horses to eat all that the useful ones earn.

Heart Pains

Are relieved, and palpitation, fluttering, and irregular pulse overcome by using Dr. Miles' Heart Cure. It makes the heart nerves and muscles strong, so the heart is able to do its work easily. This relieves the strain which causes the distress. Sold by all druggists.

"Dr. Miles' Heart Cure cured me when several doctors failed. My case was bad. I had difficulty in getting my breath, my heart beat so fast at times that I thought it impossible to live without relief; the pain was severe in my left side, and my nerves were all unstrung. I am sure I would not have been cured if I had not taken the Heart Cure."

MRS. MARY C. HAHNER,
Sullivan, Mo.

If first bottle fails to benefit, money back.

MILES MEDICAL CO., Elkhart, Ind.

Always mention Blooded Stock when writing advertisers.

Send in your renewals promptly.

Live Stock on the Small Farm

I have sometimes wondered why the farmer with the small farm did not give a little more attention to the raising of hogs, especially in the eastern states. I know of very many rough and rocky plots on some eastern farms that could be made profitable use of if utilized as pastures for hogs. The small farmer can well afford to devote a portion of his time to caring for hogs, with the reasonable assurance that he will make a fair profit on his labor and expense. A brood sow is a good animal to have on the small farm and if the pigs are not sold at four to six weeks old they can be kept until six months old and be made into pork that will sell very readily, either fresh or salted, to private customers. I find that people like to purchase pork that they know to be home-grown. I have no trouble to dispose of the surplus that I usually have.

Pigs will make good use of fallen apples in autumn, as well as of much other waste stuff about the farm and garden. If a few sugar beets or mangels are grown for winter they make a grand food as part of the ration at that season of the year.

Another animal that is much ne-

F. H. Dow.

WESTPHALIAN HAMS.

Westphalian hams have justly earned a reputation in the Old Country, which is attributed, first, to the breed of pigs in Westphalia, which produce very tender meat and a minimum of fat; the second, to the way which those pigs are fed, and third, to the way in which the curing and smoking of the hams is carried out. This latter is probably the chiefest point, and is why the Westphalia hams are the sweetest and most appetizing in the world.

The hams which bear the name come mostly from Hamburg and are cut in a peculiar fashion. The legs of pork used average about fourteen to sixteen pounds in weight and are cut long and narrow, running up to the peak. The breed of pigs from which they come are called "Ravensberger Kreuzung," or "The Ravensberg Crossbreed." They are large in size, with slender bodies, flat groins, straight snouts and large heads, while a noticeable feature is their very big overhanging ears. Their skin is white and covered with straight little bristles.

At one time the Westphalian pigs were fed largely on the acorns which they picked up in the oak woods, but this method of feeding is now superseded by the more modern one of

feeding in pens. Potatoes enter largely into the ration given. These are well cooked, and then, skin and all, mashed in potato water. The pulp thus obtained is thoroughly mixed with wheat bran, rye, barley or oatmeal in a dry condition. Corn is not used. Where practicable, sour milk is largely fed, and raw cut green cabbage is considered beneficial. The food is given in a semi-liquid condition, just moist enough to flow thickly into the trough. Plenty of fresh drinking water is allowed, and pieces of soft coal are given from time to time in order to promote digestion. During the hot season the pigs are, in many places, thoroughly washed every week with soap and water, using a hard brush, and are given plenty of exercise.

In curing the hams they are first of all rubbed well with saltpetre and afterwards with salt. In order to insure thorough salting, as many cuts as can be made without spoiling the hams are made near the bone and strewn with saltpetre and salt. The hams are then pressed in a pickle tub and entirely covered with cold salt lye in which they remain, according to their size, from three to five weeks. After this the hams are taken out and hung up in a shady but dry and airy place in order to become "air dry," a process which requires some weeks to be thoroughly done. If the

outside of the ham is not thoroughly done but is moist or sticky, it must not be yet put in the smoke house. Smoking is done in specially large rooms, the hams being hung up on the ceiling. The smoking is done with sawdust and wood shavings, to which are added juniper, beach and alder boughs and chips. The smoking must be carried on slowly. Some smoke the hams for a few days, then expose them for a time in fresh air, repeating this process until the hams have become brown enough. They should be actually in the smoke for two or three weeks. After smoking the hams are kept in a shady, dry, cool and airy room.

Now there is no reason why we on this side of the Atlantic cannot cure our hams and bacon, at home, in this manner, branding them as "Westphalia." Of course every pig raiser is not situated, either by inclination or location, to cure hams of any kind at home in a manner better than is done in the packing houses, but in dairy districts, and in districts where considerable potatoes are grown, there is no reason why a first-class article of home-cured pork could not be placed on the market equal in every respect to the famous "Westphalian" product. Here is a grand opening for many a bright, progressive farmer.

J. A. Macdonald,
Hermanville, P. E. I.



Increase Your Income

From a Small Investment 100 to 300 per cent. Profit each year

Start the Dollars Rolling Your Way

The Combination Vender or Mechanical Salesman

Distributes to every customer accurately the Finest Goods Its the greatest MONEY MAKER you ever worked with It never tires; always on duty; night and day it works for you

This Vender for
GUM, CARAMELS,
PEANUTS and CANDY

The Only Salesman of its Class One man looks after fully 150 machines

It is the 20th Century (Mechanical) Idea

One good reliable Man wanted at once in each county

Now unoccupied in the United States, not afraid of work, having some means and not now making \$1000 per year. Investigate this at once! BENEFIT YOURSELF as hundreds of others are doing and have done. Why not you?

Carfare and expenses will be allowed the right parties coming here to investigate our business and receive instructions when satisfactory arrangements have been made. We are fully protected by patents and protect our representatives in so far as we can. Should your county be taken we may be able to assign you one to your advantage.

Full particulars will be sent to any good reliable party wanting to better his income and condition and will apply for same to investigate fully. State present occupation, experience in business, and mention this paper. Highly important that you act at once and START DOLLARS YOUR WAY. Address

Combination Vender Co., Penn Yan, N. Y.

136-140 Water Street

We refer by permission to I. C. R. Assn., Penn Yan, N. Y., and the Editor of this Paper.

Directory of Breeders' Associations

The following list comprises the name of every live stock breeders' association in the United States, of which we have record. The name and address of secretary will also be found in every case. If any associations of this kind are not listed, we ask that secretaries notify us at once, and also notify us at once as to any change in names and addresses. It will be the intention to keep this list up to date, and we ask for the co-operation of secretaries to that end.

Cattle Breeders.

American Aberdeen-Angus Breeders' Association—Thomas McFarlane, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Branch Association of the North Holland Herd Book—N. F. Sluiter, Brooklyn, N. Y., Secretary.
American Devon Cattle Club—L. P. Sisson, Newark, O., Secretary.
American Galloway Breeders' Association—Chas. Gray, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Guernsey Cattle Club—W. H. Caldwell, Peterboro, N. H., Secretary.
American Hereford Breeders' Association—C. R. Thomas, Stock Yards, Kansas City, Mo., Secretary.
American Jersey Cattle Club—J. J. Hemingway, New York, Secretary.
American Polled Durham Breeders' Association—Fletcher S. Hines, Indianapolis, Ind., Secretary.
American Short-Horn Breeders' Association—John W. Groves, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Sussex Breeders' Association—Overton Lea, Nashville, Tenn., Secretary.
Ayrshire Breeders' Association—C. M. Winslow, Brandon, Vt., Secretary.
Breeders' Association of French-Canadian Cattle of the United States—W. J. McMurdy, Binghamton, N. Y., Secretary.
Brown Swiss Cattle Breeders' Association—N. S. Fish, Groton, Conn., Secretary.
Dutch Belted Cattle Association of America—H. B. Richards, Easton, Pa., Secretary.
Holstein-Friesian Association of America—F. L. Houghton, Brattleboro, Vt., Secretary.
Maine State Jersey Cattle Association—N. R. Pike, Winthrop, Maine, Secretary.
National Polled Hereford Breeders' Association—A. E. White, Chicago, Secretary, 5523 Madison Ave.
Red Polled Cattle Club of America (Incorporated)—A. Harley, Martin, Gotham, Wisconsin, Secretary.
Shelby County Fine Stock Exchange, Harlan, Iowa. L. H. Packard, Sec'y.

Horse Breeders.

American Association of Importers and Breeders of Belgian Draft Horses—J. D. Connor, Jr., Wabash, Indiana, Secretary.
American Breeders' Association of Jacks and Jennets—J. W. Jones, Columbia, Tenn., Secretary.
American Clydesdale Association—R. E. Ogilvie, Union Stock Yards, Chicago, Secretary.
Percheron Society of America—Geo. W. Stubblefield, Union Stock Yards, Chicago, Secretary.
American Saddle Horse Breeders' Association—I. B. Nail, Louisville, Ky., Secretary.
American Shetland Pony Club—Mortimer Leveing, Lafayette, Indiana, Secretary.
American Shire Horse Breeders' Association—Charles Burgess, Wenona, Ills., Secretary.
American Stud Book (Thoroughbreds)—James Wheeler, N. Y., Registrar.
American Trotting Register Co.—W. H. Knight, Chicago, Secretary.
American Suffolk Horse Association—Alexander Galbraith, Janesville, Wis., Secretary.
Cleveland Bay Society of America—R. P. Sterlcker, West Orange, N. J., Secretary.
French Coach Horse Society of America—Duncan E. Willett, 2112 Michigan Ave., Chicago, Secretary.
German Hanoverian and Oldenburg Coach Horse Breeders' Association—J. Crouch, Lafayette, Ind., Secretary.
Morgan Horse Register—Joseph Battel, Middlebury, Vt., Editor.
National French Draft Horse Association—C. E. Stubbs, Fairfield, Iowa,

Secretary.

Oldenburg Coach Horse Association of America—C. E. Stubbs, Fairfield, Iowa, Secretary.

Sheep Breeders.

American Angora Goat Breeders' Association—John W. Fulton, Kansas City, Mo., Secretary.
American Cheviot Sheep Society—F. E. Dawley, Fayetteville, N. Y., Secretary.
American Cotswold Association—Frank W. Harding, Waukesha, Wis., Secretary.
American Leicester Breeders' Association—A. J. Temple, Cameron, Ills., Secretary.
American Milch Goat Record Association—W. A. Shafor, Hamilton, O., Secretary.
American Oxford Down Association—W. A. Shafor, Hamilton, O., Secretary.
American Rambouillet Sheep-Breeders' Association—Dwight Lincoln, Milford Center, O., Secretary.
American Shropshire Registry Association—Mortimer Levering, Lafayette, Ind., Secretary.
American Southdown Breeders' Association—Frank S. Springer, Springfield, Ills., Secretary.
American Suffolk Flock Registry Association—George W. Franklin, Des Moines, Iowa, Secretary.
American Tunis Sheep-Breeders' Association—Charles Roundtree, Crawfordsville, Ind., Secretary.
Black-Top Spanish Merino Sheep-Breeders' Publishing Association—R. P. Berry, Clokey, Pa., Secretary.
Continental Dorset Club—Joseph E. Wing, Mechanicsburg, O., Secretary.
Dorset Horn Breeders' Association of America—M. A. Cooper, Washington, Pa., Secretary.
Franco-American Merino Sheep-Breeders' Association—John P. Ray,

Secretary.

Hemlock, N. Y., Secretary.
Hampshire Down Breeders' Association of America—C. A. Tyler, Nottawa, Mich., Secretary.

The International Lincoln Society—

H. A. Daniels, Clio, Michigan, Sec'y.
Improved Black-Top Delaine Merino Sheep-Breeders' Association—O. M. Robertson, Eaton Rapids, Mich., Secretary.

Improved Delaine Merino Sheep-Breeders' Association—George A. Henry, Bellefontaine, O., Secretary.

International Delaine Merino Sheep Record—U. C. Brouse, Kendallville, Ind., Secretary.

International von Homeyer Rambouillet Club—E. M. Moore, Orchard Lake, Mich., Secretary.

Interstate and International Polled Dickinson Register—H. G. McDowell, Canton, O., Secretary.

Michigan Merino Sheep Breeders' Association—E. N. Ball, Hamburg, Mich., Secretary.

National Delaine Merino Sheep-Breeders' Association—John B. McClelland, Cannonsburg, Pa., Secretary.

National Lincoln Sheep-Breeders' Association—Bert Smith, Charlotte, Mich., Secretary.

National Merino Sheep Register Association—R. O. Logan, California, Mich., Secretary.

National Shropshire Record Association—S. J. Weber, Middleville, Mich.

New York State American Merino Sheep-Breeders' Association—J. Horatio Earl, Skaneateles, N. Y., Secretary.

Standard American Merino Sheep-Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.

Standard Delaine Spanish Merino Sheep-Breeders' Association—S. M. Cleaver, West Brownsville, Pa., Secretary.

United States Merino Sheep Registry Association—J. A. B. Walker, Mount Air, Pa., Secretary.

Vermont Merino Sheep-Breeders' Association—C. A. Chapman, Ferrisburg, Vt., Secretary.

Swine Breeders.

Improved Small Yorkshire Club of America—F. B. Stewart, Espeyville, Pa., Secretary.

National Berkshire Record Association—E. K. Morris, Indianapolis, Ind., Secretary.

National Chester White Record Association—Thomas Sharpless, West Chester, Pa., Secretary.

National Duroc-Jersey Record Association—H. C. Sheldon, 604 Main St., Peoria, Illinois, Secretary.

O. I. C. Swine Breeders' Association—O. I. C. Swine Breeders' Association, Southwestern Poland-China Record Association—H. P. Wilson, Gadsden, Tenn., Secretary.

Standard Chester White Record Association—W. H. Morris, Indianapolis, Ind., Secretary.

Standard Poland-China Record Co.—George F. Woodworth, Maryville, Mo., Secretary.

United States Small Yorkshire Association—D. T. Bascom, California, Mich., Secretary.

Victoria Swine-Breeders' Association—H. Davis, Dyer, Ind., Secretary.

American Chester White Record Association, Earnest Freigau, Dayton, Ohio, Secretary.

American Berkshire Association—Frank S. Springer, Springfield, Ills., Secretary.

American Duroc-Jersey Swine Breeders' Association—S. E. Morton, Camden, O., Secretary.

American Essex Association—F. M. Stout, McLean, Ills., Secretary.

American Poland-China Record Co.—W. M. McFadden, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.

American Tamworth Swine Record Association—E. N. Ball, Hamburg, Mich., Secretary.

American Hampshire (Thin-Rind) Swine Record Association—E. C. Stone, Armstrong, Ill., Secretary.

American Yorkshire Club—H. G. Krum, White Bear Lake, Minn., Secretary.

National Poland-China Record Co.—A. M. Brown, Winchester, Ind., Secretary.

International Record Association Co.—H. A. Jones, Penn. Yan, N. Y., Secretary.

International for all breeds and countries.

Cheshire Swine Breeders' Association—Ed. S. Hill, Peruville, N. Y., Secretary.

Bargains in Poland-Chinas, Berkshires & Chester Whites



I now have a large stock of probably the best I ever owned. Cannot tell you all here, but I have hogs and sows, all breeds, to 8 months old, mixed up, and ready for service, Guernsey Calves and Registered Jersey Cattle Puppies. Write for prices and particulars. This stock must go and will be sold. M. P. Turkey, Banded and White P. Rocks, Brown Leghorns for sale.

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FOR SALE—SHORT-HORN BULL CALVES

Chester White Pigs of Various ages. One extra fine Boar that should please anyone.

JOS. T. FLEMING, Belleville, Pa.

Prof. Henry, of Wisconsin, suggests that dairy communities by neighborhoods keep either Jerseys, Holsteins, Guernseys or Ayrshire cows exclusively for convenience and profit, and they are all good dairy breeds.

One thing is essential in growing good dairy cows as it is in good beef breeds, and that is in keeping pure bred dairy type sires at the head of the herds.

The farmer who has his surplus capital invested in good horses has a draft which he can draw at any time.

Keeping the skin of the work horses clean, enables them to sweat freely and thus is essential to their health.

The mare that is suckling a colt is doing a double duty and should not be required to perform as much hard labor as the other horses.

ON THE SQUARE
1900
H. P. FOLD
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INTERNATIONAL CONSOLIDATED RECORDS, COMPRISED ALL OF ANY OF THE RECOGNIZED BREEDS OF HORSES, CATTLE, SHEEP, SWINE, LAND AND WATER FOULS, ANGORA GOATS, DOGS AND CAT STOCK.
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Personal Property Marking and REGISTRY DEVICE.
Only Impregnated System for ABSOLUTE IDENTIFICATION.
All Animals Registered Properly.



TO BLOODED STOCK

January 1st, 1907.

READERS AND ADVERTISERS—

Gentlemen: We have been before you with a proposition since July, 1906, in our advertisement, telling you that we wanted at once two good reliable men in each County to represent us before the people and to tell them what we can do for you and them.

We must urge you on to "Be Quick" now and take advantage of this proposition and accept our Grand Holiday Proposal, viz:

The First Two Applicants for Membership from each County in the United States will be given to the Breeder who will do just a few hours work for Us; and will send us in his Applications for Registry Under Our System, should he find that it will be to his advantage to do so after he has read over our entire printed instructions, which will be sent to him on application, and sure to mention that he saw this "Notice in January No.

It is no matter what others may tell you about this Plan of Our Work. You Have a Right and Privilege to Know the Truth of Our Work for Yourself. It is also your privilege to Think and Act for Yourself.

Should you already be a member of Some Single Breed Organization and you would like to make a change to ours We Will Be Glad to Have You Do So. Please name the one you are in and we will be glad to purchase your interest in it for an equal interest in this Association and will help you to have all of the stock you now have. Comprising Your Ancestral Herd from which you are now breeding, Transferred Free to You in Our Records. Then You Will Know what you are paying out your money for.

Do not Delay Sending in Your Application at Once and Secure This Offer. We want just a Few Hours of Your Time to Read Over Such Printed Matter We Send You and for You to Talk It Over With Some of Your Friends Afterward. No Other Conditions Unless You Wish to Accept Further Offers, Which You Will Be Only too Glad to Accept as Soon as You Know What They Are.

You are Invited Into Full Privilege Membership With any Good Clean Work. Should You Have Stock That is Barred by Age You Need Us Badly.

We can help you as we have thousands of others and as we will thousands more. Our New Tattoo Dies Will Soon be Ready to Send Out and You Will Have Full notice of Same Through This Paper—Blooded Stock and You Should be Together Always. Just let us know what we can do for you and we will show you plainly how we do it.

Our Advertisement Will Still Continue as Below Until Every County is Duly Represented By Our County Supervisor Who Has Duly Qualified. We Also Want Several State Representatives and Organizers. What will you do about it?

WANTED AT ONCE

Two good reliable men in each county of the United States to devote one to three months each year to our business.

A STRAIGHT BUSINESS PROPOSITION—The only one of its kind in existence. We register all kinds of animals.

LOWEST FEES

BEST SERVICE

Car fare and expenses will be allowed the right parties coming here to investigate our business and receive instructions when satisfactory arrangements have been made.

Write us fully stating your present occupation and experience with live stock. ADDRESS

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Penn Yan, New York



Why we make 50,000 miles of fence every month.

Every year since wire fence came into use, we have made and sold more wire fence than all other fence-makers combined. With the largest output at all times during the remarkable growth of the wire fence industry, we always "bid highest" for fence brains.

These master minds of steel-wire-making have never stopped working on wire-fence improvements.

And we make 50,000 miles of fence every month—enough to go twice around the world—because the discerning American farmer demands that much

AMERICAN FENCE

That's over 80% of all the wire fence sold, which means that four out of five farmers demand American Fence.

Now, four out of five American farmers are not *wrong* on this fence question.

They know that whenever they need fence, they can always be sure that American Fence is the best fence ever produced up to that hour and minute.

Recent improvements in galvanizing make American Fence longer lived, make it cost you less per rod per year's wear, though the price remains the same.

NOTE—I want to send you the combination key-ring, shown in the corner, with our compliments, as a continual reminder of American Fence. We register your name and number on our books, and return keys, without cost, if found and sent us.

Frank Baackes, Vice-Pres. and Gen. Sales Agt.
American Steel & Wire Co.
Chicago, U. S. A.

Drop
me a
postal
and tell
me how
much fence
you will need
this year.

I will write you
a personal letter
about American Fence
and send you this com-
bination key-ring, screw-
driver and bottle-opener.

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TO YOU
FREE

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IF FOUND RETURN TO
AMERICAN STEEL & WIRE CO.
CHICAGO, AND RECEIVE REWARD.

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3 YEARS for \$1.00

BLOODED STOCK



Vol. XII FEBRUARY 1907 No. 12

THE GENERAL PURPOSE HORSE

BY GEORGE MCKERROW, PRESIDENT WISCONSIN STATE BOARD OF AGRICULTURE.

THE thought of a general purpose animal is one very firmly fixed in the minds of the average farmer who has not settled down as a specialist. We often hear the specialist say there is no such thing, the general purpose idea is a humbug. We are ready to admit that people often hold to this idea when a special purpose idea would bring them a greater measure of success.

The general purpose farm horse is one that can be well utilized in ordinary farm work of all kinds and can also do the limited amount of road work needed in connection with the working of the medium sized or small farm. A horse called a "chunk" in market, standing fifteen to sixteen hands high, weighing from eleven to fourteen hundred pounds, compactly built, with good feet and legs, a tractable, lively disposition, a good, clean, rapid way of going at walk or trot is in brief the kind of a horse that I would call a general purpose horse. The kind of a horse has a place on the farms of the northwest and we may say is the most valuable class so far as farm work is concerned. As described above you will note that he partakes of the qualities of both the draft and coach or heavy roadster types, in both his conformation and his disposition.

This being true the question at once arises how can he be bred with any certainty, and this is a question I must admit is a hard one to answer. I have had this class produced in three different ways: 1st, by a trim, active Percheron sire of fifteen to seventeen hundred pounds in weight bred to grade roadster-bred farm mares of ten to twelve hundred pounds; 2nd, by using a compactly built roadster sire with grade draft mares of thirteen to fifteen hundred pounds; 3d, by use of the most compactly built coachers

and Hackneys of twelve to thirteen hundred pounds. . . . In my observation and experience these three ways have produced some very good specimens and some very poor excuses. I have also seen some very good general purpose horses of the heavier class produced by breeding up in draft lines where the sires were of the heavier types of the breed, with good nerve and action.

We must admit that no breed has yet been produced that fairly represents the true general purpose type. The true Percheron of thirty to forty years ago came the nearest to it, but breeding for more weight has made him a draft horse instead of a general purpose animal. A breed of general purpose horses can be produced by a careful selection and combination of different blood lines and a continuous breeding to a type for two or three centuries, but it seems the shortness of men's lives and small prize to be gained have thus far worked against the development of such a breed.

Very many of our farmers get the idea that all they have to do is to breed their nondescript mares to the leggy, coarse type of so-called coach horses being peddled through the country, to get this useful farm horse. I have seen hundreds of colts from this kind of breeding and must say that not 5 per cent. of them are even fair specimens of the general purpose horse, while 50 per cent. or more are failures from every point of view. I have seen much better results where the coach stallion has been a finer and more compactly built one or where a Hackney or American trotter of a compact, smooth, muscular type has been the sire.

These observations have led me to the conclusion that this latter plan is the surest one to bring some measure of success in producing the general purpose farm horse.

HORSES FOR CITY TEAMING

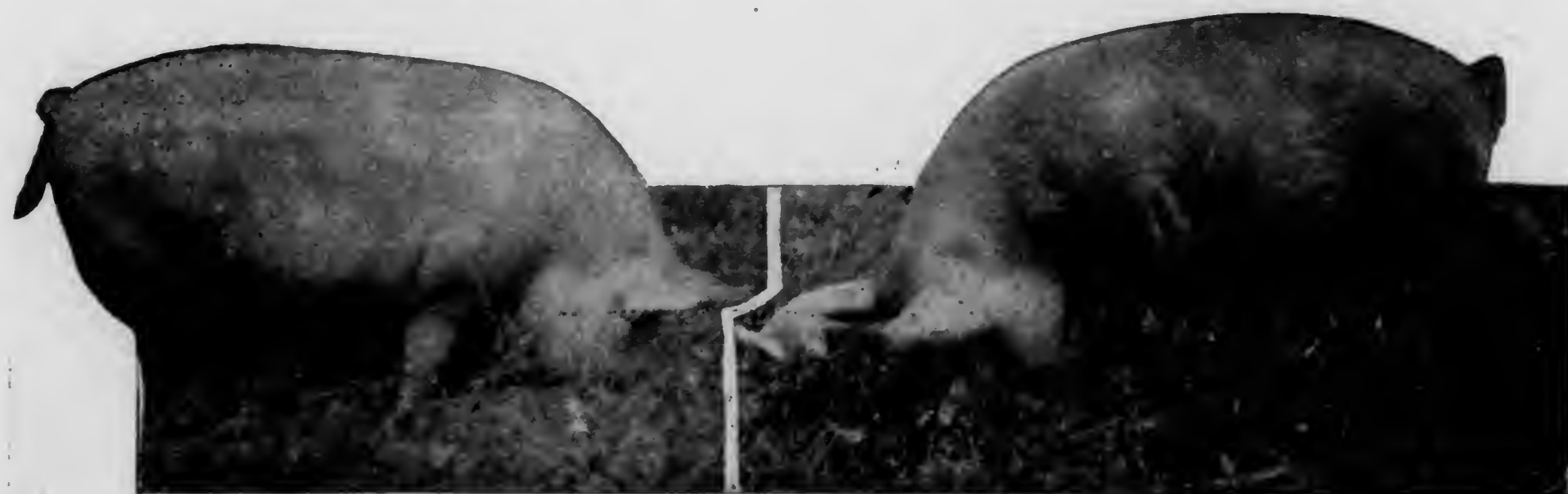
Our horses for city use weigh from 1,600 to 1,800 pounds. They should be of the low, blocky type, with first-class feet, and bone in proportion to weight. The foot should be free from fever wrinkles and side bones; the low heel and flat foot cannot withstand the city pavements. He must have a good body with well-sprung ribs, as a horse to stand work must have room to carry his rations. His disposition must be good, as a nervous horse will not bear up under city use, where we have so many things to excite him, such as street cars, automobiles, fire apparatus, and various other things.

The draft horse of today is one weighing a ton or over,

with quality; the more weight combined with quality the more money he will bring in the market. As to color, this is a matter of choice, some preferring black, others bay, and still others grey, but the old story still holds good, "a good horse is a good color."

In breeding we should aim to breed the best, a wide forehead, the full hazel eye, arched neck, short back, moderately high croup (neither too straight nor too steep), well-rounded quarters, with good broad stifles, and, by all means, the horse should walk and trot neither "winging" in nor out but lifting his feet squarely from the ground.—James G. Boyd.

Some Great Yorkshires For Sale



Dalmatian Lady Frost, No 7980, A. Y. R. Bred by Earl of Rosebury, of Scotland. This sow weighs about 900 lbs. Was a noted prize winner in England and Canada. 2 1-2 years old, and "Aldoro Clara," No. 7986, A. Y. R., bred by J. E. Butthous, of Ontario, Canada, is 2 1-2 years old and would easily carry 900 lbs. We consider her well high perfect. A superior brood sow. These are two of the great brood sows in this herd. We can sell you superior animals. Also Guernsey Cattle. Come and see us.

ALDORO FARM,

ROSSTON, PA.

BLOODED STOCK FEBRUARY 1907

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Dr. H. L. Patterson, President.

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THE BUSINESS END

A Mark here means that this paper is sent you as a sample copy. Please look it over carefully. It will keep you fully posted on the markets and what the Live Stock Associations are doing. Then "With the Business Man" and "Things to Think About" are valuable and not found in any other paper.

No other farm paper will contain so much valuable information as Blooded Stock during 1907. You cannot afford to miss it. Send us your subscription and get the next issue.

6. Send us one dollar and fifty cents and the names and addresses of twenty-five farmers interested in live stock and get Blooded Stock three years and your choice of one of the following free for one year:
Breeder's Gazette, Chicago, Ill.
Country Gentleman, Albany, N. Y.
New England Homestead, Springfield
Rural New Yorker, New York.
Orange Judd Farmer, Chicago.
Am. Agriculturist, New York.

A MARK here means that your subscription expires with this issue. We desire to call your attention to some of the subjects that will appear in Blooded Stock during the coming year. Some of the very best writers in the country will write for us on these subjects and the information in any number will be worth more than the whole year's subscription. You cannot afford to miss anything these writers say.

On this page you will find our subscription offers for the season. You can save money by using some of these offers. We want your renewal at once. Please attend to it so that there will not be any delay. We do not intend to send our paper to those who do not want it, so we wish a prompt reply to this notice.

SUBSCRIPTION RATES.

1. Fifty cents a year or three years for one dollar.
2. Send twenty-five cents cash and the names and addresses of ten of the best farmers in your section and get the paper one year, or send seventy-five cents and the names and addresses of twenty-five farmers interested in good stock and get Blooded Stock for three years.
3. Send three new subscribers and one dollar and get Blooded Stock free for one year.
4. Send one dollar and the names and addresses of twenty-five farmers and get Blooded Stock for three years and any one of the following list free for one year:

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Farm Journal, Philadelphia, Pa.
Successful Farming, Des Moines, Ia.
Ohio Farmer, Cleveland, Ohio.
Mich. Farmer, Detroit, Mich.
The Farmer, St. Paul, Minn.
Indiana Farmer, Indianapolis, Ind.
Agricultural Epitomist, Spencer, Ind.
Am. Swineherd, Chicago, Ill.
Western Swine Breeder, Lincoln, Neb.
Green's Fruit Grower, Rochester, N.Y.
Kimball's Dairy Farmer, Waterloo, Ia.

Reliable Poultry Journal, Quincy, Ill.
Poultry Success, Springfield, Ohio.
Am. Poultry Journal, Chicago, Ill.
Poultry Advocate, Syracuse, N. Y.
Farm Poultry, Boston, Mass.
Inland Poultry Journal, Indianapolis, Ind.

Poultry Tribune, Freeport, Ill.
Successful Poultry Journal, Chicago.

5. Send one dollar and twenty five cents and the names and addresses of twenty-five farmers interested in live stock and get Blooded Stock for three years and your choice of any one of the following papers free for one year:

Hoar's Dairyman, Ft. Atkinson, Wis.
National Stockman, Pittsburg, Pa.
Am. Sheep Breeder, Chicago, Ill.
Western Fruit Grower, St. Joseph, Mo.
Kansas Farmer, Topeka, Kansas.
Wallace Farmer, Des Moines, Ia.
Practical Farmer, Phila., Pa.
Prairie Farmer, Chicago, Ill.
Homestead, Des Moines, Iowa.

PROGRAM FOR 1907.

January—Milking Machines
What they are, their development and what they will do for the dairyman.

February—The Horse on the Farm
How to make the most out of him—combining work, profit and pleasure.

March—Farm Poultry
What to keep—how to care for—its place on the farm.

April—Silos and Ensilage
Cost of erecting—advantages to be gained—profit.

May—Separators on the Farm
The advantages to be gained and profit saved. What is required.

June—The Model Dairy Cow—Form and Purpose.
Breeds best adapted—How to select and what she should do.

July—Cow Bars
Illustrated—Showing plans and conveniences.

August—Goat Growing
What the industry is—requirements—returns.

Gasoline Engines—As a farm implement can be used in many ways.

September—Hog Houses
Plans illustrated—showing how and giving ideas.

October—Roofing for Farm Buildings
Cost—how applied—help necessary to put on.

November—Mule Breeding
The demand, supply and profit.

Sheep Growing and Feeding—How a few can be profitably kept by every farmer.

December—Beef Cattle Breeds
Selection—age to fatten—when to market.

We need your assistance to get your neighbor to see Blooded Stock and have him subscribe. He needs it badly and cannot afford to miss what will be said under our program for 1907. See him at once. Let us know and we will send you sample copies and pay you a liberal commission. Want you help us?

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We want you as one of our paid subscribers. If you have not sent in your renewal we trust that you will let us have it at once. Several thousand of our readers got a marked copy for January, showing that their subscriptions had expired. We are not going to send our paper on and then ask for back pay. However, we do want you to continue with us. We want only a "square deal" and are trying to give our readers something a little better than other papers. We know that many good things will appear in Blooded Stock for 1907 that will be entirely new, that everyone should read, so if your subscription is out please attend to it at once.

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Things to Think About

A GREAT MANY FARMERS do not get half out of their farms that they should because business methods are not followed up like the man in the city has to follow business. Some farm for one line and others follow another line, using different methods. Each in his own way or fancy, but seldom do they combine and all work for one object.

ONE OF THE BEST THINGS that the farmers of any section could do would be to meet together settle on some line of breeding and improving their stock of horses. This does not mean that they must breed Percherons, Belgian, Clydesdale, Coach or Trotters, but they can organize and have a committee composed of men who have made a success of selecting horses that suit the market requirements. This committee to select or recommend the stallions in each breed to be used. They should be instructed to see that no unsound stallions in any particular be allowed to be used, as this same unsoundness will appear in the young and thereby lose your money. This committee should pass judgment upon every mare to be bred, and after considering her size, breeding and conformation, then make the recommendation as to the stallion to be used. That the best results be obtained do not cross breeds but breed Clydesdales to Clydesdales and Coachers and Trotters to Coachers and Trotters, but in every case have the selection made to improve.

IT WILL BE IMPOSSIBLE for every one to get such clubs organized, but every one can go to some one who has made a success in breeding and raising the same class of horses and get advice. When you go for this advice be honest with yourself. Ask this friend his opinion of your mare. If he says she is not as good as you ought to have or is unsound and not fit to breed from, take his advice and sell her and buy one that is fit. Do not breed from a mare that has spavin, curb, splints, crooked feet or legs. Breed to raise horses that will command good prices.

WISCONSIN HAS PASSED a stallion law compelling all stallions kept for service to be passed upon by the State Board of Examiners and since the law went into effect the class of stallions kept has been greatly improved and the unsound horse is out of business, and the farmers of the state are beginning to realize the great value of breeding from only the best.

WE ARE AWARE that every farmer is not a horseman and an expert in breaking and getting such animals ready for market or to give the care and training necessary to get the best out of the colt between the age of three and five years of age, but every farmer can feed and care for them up to three and not only have them well fed but have them nicely halter broken and have them learned to stand up when led out and to lead in the halter.

WE HAVE NEVER SEEN a nicely built colt of any breed that had been well cared for, that had been handled so as to be accustomed to the stable and halter, but what there was always buyers for at a figure that would net the raiser a profit, if he did not care to take the risk in breaking and getting ready for market. Every farmer could make his farm team a source of profit in this way and at the same time get his work done, where now it is an expense to keep up the team and at the same time he has to pay out money from time to time for horse flesh that he should raise himself.

UNSOUND STALLIONS that have been discarded by good breeders and palmed off at any price to dealers at auction sales, are the curse of the farmer. These stallions find their way among the farmers and are in the hands of the liverymen and horse jockeys around the small towns. Many of these stallions have been tried and their colts are inferior, others one fault or another, and to the average person are nice looking because they are well fed, but to the horseman who is looking for something good they are plugs. These stallions are hacked around at service fee of from five to ten dollars. The breeding to such horses has caused many a man to give up an otherwise profitable business, as the colts were disappointments. This will be the case just as long as such stallions are used.

EVERY FARMER should keep at least one-half of his horse flesh mares. He will do the farm work just as well and at the same time can breed and raise a few head of colts at a very little expense, which will bring him in a nice revenue as they are ready for market, if he will go about breeding as indicated above. These colts will pasture along and the owner will not be at much cost during the summer months. In winter they will require a little attention and a small amount of grain. This will be well repaid for in the end.

THE FUTURE OF THE HORSE MARKET

Written for Blooded Stock by T. A. STEVENSON, SHANNON CITY, IOWA.

THE horse is one of Man's best friends; faithful, sensitive, and as intelligent or nearly so as ordinary mankind—he toils over mountain peaks, hauls great loads upon the streets—all over the world the faithful horse is found bearing man's burdens, speeding him through space, saving him time, and helping him on to greater usefulness and happiness.

As to the future of the horse and the market, I want to say that I am no prophet, neither am I the son of a prophet; neither do I think that it requires a prophet to predict what the near future of the horse market is to be. You can all remember a few years back when some of the good farmers of our land were saying that we had come or were coming to a horseless age, or nearly so, with an over supply at the time. Now the fact is, the farmers practically quit raising horses for a few years, and we have today this horseless age predicted—horseless age—but horseless in that we have not got the horses to supply the demand, nor will we have for some years to come.

There is just as many horses used in the United States, or if you please, the world over, as there ever was, and I think a great many more—but not nearly so many raised, especially in the west and northwest. The settlement and development of the western country has brought about high-priced land, and almost entirely done away with the ranch horse business. In this and many other ways the breeding of horses has been curtailed.

If you will talk with horse buyers, buyers of good 1600 to 2000 pound horses, you will find that they will tell you it is almost impossible to find such horses in the country. Further you will find that such horses are now bringing from \$200 to \$500.

Of my own personal knowledge a horseman in an adjoining township was offered \$1000 for a span of first-class geldings weighing over 4000 pounds. There is such a strong demand for good young horses that dealers are often found buying three-year-old colts, pulling their teeth and putting them on the market as four-year-olds, past. Man should be far from deception; "yet still we hug the dear deceit."

Truly this is a horseless age, as we farmers are short on good horses, and I might say long on "scrubs." In my judgment there is not over 25 to 30 per cent of the colts foaled that will ever grow up to be sound, well matured horses. A very large per cent. of foals die, or are crippled and blemished before they are two years old.

Why is it that the farmer does not fatten his horses for the market, instead of selling to men who make it a business to buy and prepare horses for the market? He has at hand every means that the professional horse feeder has, to put the horse in condition for the market—the market always demands a fat horse. Take a large upstanding thin horse (I mean one in just good stock condition) weighing 1600, and by proper care you can easily put on 100 pounds per month for four months, which will then make him a 2000 pound horse, and easily worth \$100.00 more than when you began feeding him—try it and see if it does not pay.

During the depression of the horse market a few years ago, a great many of the best mares were sold off the farm because it did not pay to breed horses, and we were coming to a horseless age.

Others that were kept on the farm were not put to breeding to any great extent, consequently there is a shortage which it will take years to overcome. There is today in all our large cities a great demand for first-class heavy horses, more than has been known at any time in the history of the world.

All these influences have had, and will have, a telling effect on the future of the horse market. It is the opinion of the writer that horses will continue to bring good remunerative prices for a number of years, and that an over-plus is farther off than most men think.

And now a few words as to the class of horses farmers should raise. In my judgment there is but two classes of horses profitable for the farmer to raise—the draft and coach horse, and as my experience has been along draft horse lines, I feel that I am more capable of saying something favorable of the great big ponderous upstanding English Shire, Clydesdale, Percheron or Belgian horse, which most farmers so much admire. The admiration

which is shown at the International Show for the great big 2000 pound horse when hitched in harness is plainly visible, for there the greatest crowds of the week line up when the draft stallions and mares of the different breeds, and the drafters in harness are at the tender mercies of the judges. The draft horse in harness! Ah, there we can all be at home. The sturdy old farmer and his good natured frau use them every day from break up in spring to freeze up in fall, and between times as well, on the road, to church, to mill and to market. Truly our friend in need.

I have seen the horse show at the International, Chicago, Ill., almost every year since 1900, and each year since that time I can truthfully say that the interest in the drafter, in harness and out, has been steadily increasing. A sage once said, "show me the horses of a country and I will tell you what the people who breed them are like." Show me a man that loves his horse, and is kind and gentle with him, and I will show you a man that ninety-nine times out of a hundred makes a success in life. Truly the horse is one of man's best friends, and a servant that we do not credit with all he deserves. Too often we mistreat our best friends.

Does it pay to breed good draft and coach horses? It certainly does; good ordinary draft horses are selling on our farms today from \$150 to \$300. To my own personal knowledge we have one professional buyer and feeder who has fitted in the last eighteen months three carloads (60 head), for which he received at his barns an average of \$300 per head, or a sum equal to \$18,000. Armour offered a dealer \$2000 to duplicate the heavy four-in-hand shown at Chicago.

The Pabst horses, as matters of public record, cost from \$250 to \$600 apiece. The Morris horses, Marquis, Kenneth, Gallant and Archie, it is said cost not less than \$500 each. It is a common saying in the west that horses are "higher than a cat's back."

Taking into consideration the common ordinary farm draft horses and the price he brings on the market, answers the question very fully, "Does it pay to breed good horses?" in the affirmative.

The coacher, when bred along proper lines—that is for style, action and size—is a money maker as well as the heavy drafter, but from what I know of horses in this part of the west, I am led to believe that there are but few good coach mares in this part of the west or middle-west that are suitable for the foundation of the coach horse industry. There is no farmer in this beautiful land of ours, who loves and admires horses, but what can make money out of them if he will only procure a few good mares and mate them properly, either to choice specimens of the draft breeds or coachers. We must use good seed if we expect a harvest. "Whatsoever ye sow, that shall ye also reap." You cannot raise drafters and coachers that will make you money from "scrubs." Keep the good seed on your farm, if you wish to make a success of the horse business. There is not enough of good high-class mares on the farm today, and the farmers have no one to blame but themselves. When tempting offers were made for them, they sold their very best mares, evidently thinking they were making money. This in my judgment shows a lack of mathematical calculation, and a highly unprofitable transaction from a financial point of view.

Let your motto be, "The best is none too good for me."

A CARRIER PIGEON.

A remarkable story of the sagacity and physical endurance of a carrier pigeon is told in Nansen's story of his Arctic explorations. One day the pigeon tapped at the window of Mrs. Nansen's home in Christiania. It was immediately opened, and the little messenger covered with kisses and caresses by the explorer's wife. After an absence of thirty months from the cottage the pigeon had brought a note from the explorer over a thousand miles of frozen waste and another thousand of ocean, plain and forest.—Our Dumb Animals.

SIZE IN BREEDING HACKNEYS

THE Hackney action is the superb quality so desirable in harness horses, it can be bred in with the beautiful conformation of the Hackney type has made the Hackney the popular show horse. The trotting horse breeders, had as they despise the Hackney horse, are trying to get Hackney action, it is sometimes trained in, but it is soon lost. Many of the trotters have enough Hackney blood to impart the Hackney action that is more valuable than the mere speed of the trotter.

Most Hackney breeders prefer the superb quality to the larger size of the Hackney, but the demands of the markets is for large size in the Hackney and Coach breeds. The size of the Hackney can and will be increased, but not suddenly, as it takes years of skillful scientific breeding. It has taken a hundred years for the large coach horse breeds to attain the size and retain the quality and action. A writer in the English Live Stock Journal says:

My opinion has been and always will be, until proved otherwise, which it has not up to the present, that if we are to retain character, quality, good flat bone and above all, action, we must cling to the stallion that ranges from 15 h. to 15 h. 2 in. high, as it is quite clear that in almost every case where the stallion is 15 h. 3 in. or over, he

does not combine these good points, which is essential to a good Hackney. We have only to refer back, and what do we find? That with very few exceptions all our best Hackneys have descended from the smaller sires, viz., Lord Derby 11, under 15 h. 1 in.; Danegelt, 14 h. 3 in.; Fireaway, 15 h. etc. Then take our present day sires which have established themselves as good getters; they are not the ones 15 h. 3 in. or over. There are three living sires that might be named; one I should not think exceeds 15 h. 2 in., another 15 h. 1 in., and another 15 h. Yet these horses have now stood at 15 pounds 15 s., 12 pounds 12s., and 10 pounds 10s. a mare, respectively for some time.

What we want is a mare not less than 15 h. 2 in., with good breeding, sound, well-turned limbs, and sufficient length to carry a foal, mated with the class of stallion I have mentioned. Then, I think, we shall be able to put before the public a larger majority of the desired type, with size and more action, than we are doing at present, as the kind of stallion I am advocating has fully proved himself, both in the past and at the present time, capable of getting his stock big enough, providing the mares are of the right stamp."

HUNTER TYPE OF HORSES

THE European military demand has for centuries developed the Hunter type of horses, and rival the Hunter sportsmen in paying the best prices for the best horses. Army horse buyers in Europe are not limited to bronco prices of \$100 to \$125, as our American cavalry contract system, to get whatever they can for that price, which makes our cavalry the laughing stock of the world. A number of our horse buyers are eager to get a Hunter type of horse that has good size, great endurance and good conformation, with more substance and quality than the modern thoroughbred. Such horses command \$300 to \$500, and horse show specimens high prices.

How can such horses be produced? There is no such breed that reproduces the type. The English Hunter and the Irish Hunter are usually the product of thoroughbred sires. The English and American thoroughbred has degenerated into useless weeds. The Hunters Improvement Society, in England, is urging the use of Hunter-bred sires, but stud book registration is necessary to right selection and good breeding in both sire and dam. The failure of the American trotter in its lack of reliable or uniform production is due chiefly to the faulty system of recording all manner of grades by performance of speed, rather than upon ancestral lines, and the infusion of weedy thoroughbred blood has increased the nerve force for speed at the sacrifice of beauty, conformation and substance.

THE HORSE FROM EVERY POINT OF VIEW

Take care of the weaning colts and give them the best care, feed and attention to develop that good size and early maturity. There never was so much money in any other stock as in raising good draft and Coach horses.

The draft horse is the popular farm horse and is in great demand for the city at higher prices than any other stock.

Breed only pure-bred sires in every class of stock and you will soon want pure-bred dams too, and raise pure-bred stock to top the market and sell for breeding at pedigree stock prices.

The Draft horse has added more wealth than any other class of horses, and we might say more prosperity to American farmers than any other breed of stock.

The high price of good horses should awaken farmers more vigorously to supply the demand. It is the first time the American farmer did not meet any market de-

mand for any class of stock. With twenty million horses, we should have more than twenty thousand good, high-class horses to suit the markets.

The American draft horse is the most profitable and prosperous live stock proposition for 1906.

The heavy draft horse trade is brisk for any animal of class. There are constantly calls for really big, heavy, sound, handsome wagon horses, standing 16½ hands high, on stout, bony legs, with plenty of feather. Any farmer having such as these may make a hatful of money off them, if they turn them adrift promptly to get fat on some good keep. The special big markets will come on about the middle of November, and then is the time to offer such stock. Undersized, middling-shaped animals hang as heavy as lead on the markets now, and are likely to. Again, farmers should look well to their younger horse stock for sale this back end. I allude to two-year-olds, yearlings, and foals. High condition—that is, plenty of flesh—goes for a good deal, and is said not uncommonly to deceive the best judges extant.

POINTS OF THE LIGHT HORSE

BY A. S. ALEXANDER.

ON general principles most of the requirements mentioned in describing the points of the draft horse equally are applicable here, but refinement of character throughout the frame, excellence of quality, high spirit, nerve, stamina, endurance, grace, action and intelligence must be of a high order. According to its special purpose the light horse must have the specialty highly developed and be perfectly equipped in every way for the performance of its work. "Blood" shows even more prominently in light draft horses than in the more phlegmatic drafter and should be evidenced by style, nobility, grace, beauty of every curve and outline, dignity and refinement. The skin should be thin, pliable, glossy, showing veins and tendons plainly, while the hair should be silky, free from coarseness and fine, long and flowing in mane and tail. The body and limbs should show every requirement of strength and endurance, lack all impediments to speed and free action and give the impression of trained athletic capacities.

Head. A clean, "breedy" looking head, free from surplus flesh and fat, wide between the eyes, straight neither Roman-nosed or dished, fine skin showing veins and muscles distinctly; neat, firm, refined in muzzle, having large, flexible nostrils, lined with pink membranes; lips thin and firmly controlled; jaw bone wide apart and clean; eyes, full, clear, prominent, fearless yet mild, bright, sound; ears, neat, pointed, alert, free from coarse hairs, erect, and of proper proportion, characterize the aristocratic trotter, thoroughbred and "gentleman's horse." Departures from any of these requisites detract from beauty, breed, character or utility.

Neck. While the draft horse's neck is somewhat short and heavy from wealth of powerful muscle that of the light horse should be long, graceful, covered with long, thin, refined muscles, prettily blended into the head at the throat-latch, free from pronounced glands about the throat, arched, comparatively thin, not "ewe-necked," not notched downward in front of the withers, but smoothly molding into that part and the shoulders. A large, prominent windpipe, together with wide, flexible nostrils indicates lung capacity and necessarily endurance. A small windpipe and dilated, rigid or over distended nostrils may indicate defective respiratory organs.

Chest. In connection with what has been said about nostrils and windpipe the shape and size of the chest may next be most properly considered. While great width of chest is less common and not so necessary in the light horse, as compared with the draft horse, it is imperative that there should be great depth and capacity for fully utilized lungs and heart. Great speed would be prevented by too much spring of rib under the shoulders of light horses but the girth should be large and the sternum (breast bone) well let down.

Shoulders. While we have set down the correct type of shoulders for the draft horse as "moderately sloping" the light horse on the contrary should have long, oblique shoulders to give him great leverage and strong control over his legs for fast, free, long striding gait at the walk, trot or run. Such a shoulder is also necessary to the safe saddle that must not stumble and must be springy and elastic in his action for comfortable riding, and in the high stepper to make "trappy" knee action possible. Upright shoulders and pasterns of similar shape cause stilty, stumbling, stubby action and are even more objectionable in light than in draft horses. Together with proper conformation in the respects noted the muscular development of the shoulder should be as perfect as possible.

Bones, Joints and Feet. Both in front and behind the light horse should have leg bones of the finest quality—flat, cordy, like a razor blade with the wide part forward and the thin edge behind and from it protruding, boldly and prominently great, dense, clean, straight tendons. Such legs last, stand wear and tear, are formed of dense, ivory-like bone and are free from meatiness. All of the joints should be large, clean, set at correct angles, free from puffs, bony growths and other forms of unsoundness and should be perfectly flexed when walking or trotting. Long forearms and gaskins with short, strong cannon, long, sloping, well supported and perfectly clean pasterns springing from open, large coronets, and above sound, dense waxy, smooth sound hoofs that are not too low or too high at the heels give the muscular, well-bred light horse ability to go fast, endure work, withstand concussion and beget the right stamp of underpinning if he is



A pair of famous light harness brood mares owned by L. V. Harkness, Lexington, Kentucky.

to be used for breeding purposes. Departures from correct conformation, in any one of the points mentioned, will be more apt to injure the action of a light than a draft horse. Absolute soundness and perfect quality of material are necessary in the legs of a horse that has to be campaigned and any weakness will soon aggravate into an unsoundness or cause of lameness under the stress of fast work.

Body. Great depth of body is desirable at the heart girth and here the elbows should not cling too close to the sides or they will impede motion. Similar depth of barrel, viewing the horse from the side, is often due to lack of spring of rib and this is undesirable. Well sprung ribs are desirable in all horses although they may give an appearance of legginess which is not actually present. A round barrel, with low flank, means good keeping qualities and, even in the fast horse, this shape is to be desired although training will reduce the size of the abdomen and so, apparently, raise the flank and possibly give the coupling an appearance of too great length. A short, strong coupling is desirable, so long as the underline is long but not too much cut up in flank. The back should

be broad, well covered with muscles, the croup long and muscular, the thighs deep, full and plump with muscle extending down over the gaskins, while the quarters, viewed from behind, should be full, thickly muscled and not of the too common "cat-hammed" type.

Hind Legs. What has been said of the legs in general should be born in mind and it is especially necessary to insist upon strong stifles and the largest and soundest of hock joints, which, in trotters, are set low on account of long gaskins but should not incline "sickle" shape encouraging the throwing out of curbs, or be too straight, shortening action and inducing thoroughpins and bog spavins. Tendons should be large, free from puffs and

straight when viewed from the side. "Bowed" tendons, bulging profile of the front of the cannons ("buck shins"), "broken down" pasterns and unsoundness of the feet, in front or behind, generally indicate some error in conformation that has given rise to undue strain or concussion.

All of the unsoundness mentioned in speaking of the draft horse are to be avoided in selecting light horse breeding stock and in addition we would advise rejecting for use stallions and mares that have peculiarities of conformation inducing any form of lameness or in any way departing from the requirements upon which depend, to a great degree, ability for any one of the purposes of the trotting, pacing, running, jumping, saddle, coach or carriage horse.

POINTS OF A DRAFT HORSE

HEIGHT—A typical draft horse should stand sixteen hands high or somewhat over that height. Extra tall, leggy drafters, deficient in weight, width and quality are unlike in the markets and many of them are prone to chorea (St. Vitus' dance). Abnormally tall horses unless wonderfully good in conformation so that the height is not ungainly, are difficult to match and therefore not in demand in the market. Such horses are used for single work or as the middle horse if a three-horse team for hauling coal, etc.

Weight—A draft horse should weigh sixteen hundred pounds and upward. Weight is absolutely necessary for the hauling of heavy loads. It enables the horse to derive full benefit from the strength of his muscles and tendons, adds to the effect of his levers in motion, and gives him a firm grip upon the ground. It is a burden and practically useless when not associated with perfectly developed, exercised muscles, so far as actual work is concerned, but is requisite in every draft horse offered upon the market if he is to command a high price. Where the frame shows adaptability, in a thin horse, to put on flesh he is bought by the professional feeder who finishes him for the market. In a well developed draft horse extra condition is considered worth twenty-five cents per pound in the Chicago market. For practical purposes the great weight of a draft horse should be made up of large, strong bones and powerful muscles throughout the frame. Fat should be discounted in buying a draft horse for work and, in judging, one should note development of muscle rather than wealth of flesh and fat. A typical draft horse should weigh sixteen hundred pounds or over when deprived of the condition referred to.

Form—The entire make-up of the draft horse should suggest strength for heavy hauling. He should be broad, deep, thick, round, with each part in keeping with its neighboring parts, giving an appearance of symmetry and massiveness. He should be low down, blocky and compact, on short, strong-boned, clean legs showing marked prominence and development of tendons and the legs should be properly placed and set to insure correct, straight action at the walk and trot.

Quality—This term applies to evident refinement in character of skin, muscles, bone, tendons and hair. It infers also aristocratic breeding and all the attributes of pure blood. It is indicated by high spirits, vigor, sprightly action, endurance, stamina and intelligence and is plainly indicated when the legs are free from meatiness, appear broad, flat, "clefthy" and, if furnished with "feather," the hair under the knees and hocks springs as a silky fringe from the rear of the tendons. Quality offsets grossness and combines grace with great weight and power in the best types of draft horses.

Action—A draft horse will have to do most of his hard work at the walking gait. It is therefore of supreme importance that he should be able to walk fast without tiring and in order to do this his action must be perfectly straight and level. The joints must be easily and fully flexed, the feet must advance and be set down without deviations from a straight line. The soles of the feet should turn up and show plainly to the judge as the horse goes from him, at both walk and trot. The feet should be lifted quickly fully and rhythmically and set down squarely and firmly. There should be no paddling, dishing, cutting or interfering; nor should the fore legs roll or the hind legs be carried too close together or too far

apart. In judging of action note the movements of each leg and foot, the handling of each joint and the carriage of the entire body as the horse walks and trots around an enclosure, from the observer and to him. Lameness should be absent. The hocks should be carried well together. Rolling in front is due to too great width of chest. Stubby, stilty action in front indicates straight or too upright pasterns or shoulders, foot troubles or weak knees. Similar action of the hind legs indicates upright pasterns, unsound feet, hock disease, weak stifles, hip weakness or kidney trouble. Knee and hock action should both be free and comparatively high.

Temperament—A draft horse should have an energetic disposition but should be free from vice, docile, tractable and intelligent. Sluggishness, associated with obesity is objectionable and induces diseases such as "grease," eczema and "lymphangitis."

Head—The head should be of good size in keeping with the proportions of the body, free from grossness, meatiness, coarseness, pronounced angularities.

Muzzle—Should be fine, compact, of good quality as regards skin and hair, nostrils large and flexible and their lining and that of the partition between the nostrils (septum nasi) pink in color, healthy, free from ulcers or purple spots; discharge should be absent; bad odor suggests chronic catarrh or a diseased molar tooth; lips should be thin, mobile but firmly pursed, not drooping.

Eyes—Should be large, bright, mild in appearance, sound, free from cloudiness, white spots or ring, not staring and bulging as in palsy of the sight (amaurosis), each of the same color, lids free from wrinkles, discharge of tears over the face is objectionable. Test eyes by gently threatening to strike them with hand. Horse should flinch under this test; pupils of eye should be elliptical in form, not spherical, and should contract when exposed to the light on coming from a dark stable.

Forehead—Should be wide between the eyes as an indication of intelligence and profile of face should not be too prominent (Roman nose) or too much dished.

Ears—Should be of medium size, proportionate according to size of body, pointed, well carried, not coarsely. If rigid, suspect deafness; if too alert and constantly moving suspect eye disease or imperfect vision. They should be free from slits or other injuries and from discharging fistula at base.

Lower Jaw—Angles should be wide and space between jaws clean and free from abscesses or tumors. Jaws too close together mean poor masticating capabilities and horse is usually a "hard keeper."

Neck—Should be strong, massive, of sufficient length, well arched, covered with strong muscle, nicely and neatly fitted into head, clean at poll and throat-latch, molded evenly and snugly into withers and shoulders, sound at seat of collar, mane full and lying properly, free from sores in skin, windpipe large and prominent, jugular vein uninjured by bleeding.

Shoulder—A majority of poorly formed draft horses have too steep shoulders. The proper type is moderately sloping and sufficiently so to afford a comfortable and secure bed for the collar. Straight or rather upright shoulders detract from easy action of fore legs and are usually associated with upright pasterns. Should be smoothly and deeply covered with muscle, show no prominent angularities, protruberances, sores or tumors, and fit snugly into neck and body. Withers should be fairly

high, free from sores or discharging sinuses (pipes).

Arm—The arm is formed of the humerus and extends from point of shoulder to elbow joint. It should be strong, short, well-clad with muscles, thrown back sufficiently to bring the leg into proper place to support weight of fore quarters. Elbow should be prominent, strong, clean and not carried too close or too far from sides.

Forearm—This portion of the body, together with the gaskin, or second thigh of the hind leg, cannot well be fattened. Muscles and bones give these parts their size, width and depth. The forearm should be long, broad, wide, muscles prominent above balance of part clean and free from meatiness.

Knees—The joints cannot well be too large and strongly developed in each bone entering into their composition, so long as they are free from puffs, meatiness, bony growths or other unsoundness. Knees should be wide, deep, straight, strong, clean, properly set and not tied in under joint. Sprung knees are objectionable as are the reverse, known as "calf knees." Splints on sides of cannon bone, close up to the knee, are liable to cause lameness and are to be considered dangerous and objectionable.

Cannons—These bones extend from knee to fetlock joint in fore and hock to fetlock in hind legs and should be large in size, short, clean, wide, flat-appearing, free from meatiness and puffs, tendons very prominent at sides and behind. "Feather," if present, should be fine,

the foot and by bony column superimposed thereon jar the parts and set up irritation and inflammation which are apt to result in such unsoundness as navicular disease, side bones, ringbones, quarter crack, corns, contracted heel and kindred troubles. The bone of the pastern should have a slope of about forty-five degrees and the front of the hoofs fifty degrees. Upright pasterns induce stubby action and horses having such conformation wear out quickly upon the streets. Springy, elastic action comes from oblique yet strong pasterns and the feet under such wear well on the pavements.

Feet—The hoofs should be of good size, sound in texture, waxy and healthy in appearance, free from wrinkles, ridges, cracks proceeding from the hoof-head downward, and prominent projecting growths at the toes, indicating chronic founder (laminitis). The color of the hoof is of little importance so long as the hoof is sound, fully developed, healthy and properly formed. The hoof is a continuation of the skin of the leg and takes its color from that of the skin of the coronet and pastern. Dark horn is, however, popular with many horsemen. The hoof-head should be prominent, heels wide, strong, not too close to the ground. The sole should be slightly concave, not markedly convex or flat; the frog large, healthy, elastic, free from deep cleft, bars prominent. Small, brittle, flat, weak, low-heeled or great, spongy, soft, brittle feet as well as those that are notable unsound should be avoided in selecting breeding horses.



IMPORTED BELGIANS—HEAVY DRAFT HORSES.

silky, and springing from rear part only. Such hair indicates fine quality of dense bone and is usually associated with good development of strong tendons. Coarse, kinky hair, growing from rear and sides of the cannons, indicate coarse skin and spongy bone, gives the legs a round appearance and is indicative of sluggish temperament and susceptibility to grease, etc.

Fetlocks—What has been said about "feather" applies most particularly to this joint which should be strong, wide, deep, straight, free from puffs, interfering sores or callouses, not knuckling forward or set too far back.

Pasterns—Formed of the long pastern bone (os suffraginis) extending from fetlock to hoof-head (coronet) should be strong and wide and moderately sloping; not short, upright and stilty looking. The average draft horse inclines to steepness of pastern and consequent stubbiness in gait. Very long, weak pasterns that bring the back of the fetlocks too near the ground, are objectionable as they cause strain upon the tendons and detract from ability to handle heavy loads. Too short, distinctly upright, pasterns are even more objectionable. They prevent springy, elastic action of the feet and by immediately transferring concussion from the ground to

Chest—The chest should be of sufficient size, depth and width to give ample capacity, endurance, vigor and easy keeping qualities. The reverse conformation is objectionable in all horses. Great width of chest, with the fore legs set too far out, causes rolling motion and is objectionable. Width of chest should be accompanied by properly laid shoulders, arms and elbows so that the action is unimpeded and straight.

Ribs—It is highly important that the ribs should be well sprung so that the digestive organs shall have ample room. A round, deep barrel bespeaks good digestive capacity and means strength of constitution and ability for hard work if the body is deeply and evenly clothed with muscle. The last ribs should be deep and come close up to the hip constituting a close "coupling." With this conformation goes a low carried flank, indicating an easy keeper. The reverse—long, weak, washy, shallow coupling—indicates poor keeping qualities, tendency to scour, constitutional debility.

Back—The draft horse should have a short, wide, thick, strong, straight back giving room for attachment of large, powerful muscles and given its size and shape not only by spring of rib but development of the muscles alluded to.

Loins—What has been said of the back equally applies

to the loins. In stallions a weak low back will be apt to grow more pronounced in its weakness with age and service. In mares the back is naturally longer but should be strongly supported at the coupling and deep in flank.

Hips.—There is great diversity of form in the hips of draft horses. On general principles it may be said that all drafters should have wide strong muscled hips, free from prominent angles, smooth and neither too straight nor too drooping in croup. The straight or level croup is characteristic of the thoroughbred horse and his crossbred descendants. In draft horses the very steep, drooping croup, probably traces to the old black horse of Flanders. It is highly objectionable as it allows less space for the attachment of the powerful muscles of the hind quarters and is very often associated with slouchy action of the hind legs, which are advanced too far under the body when in motion. The amount of muscle upon the croup is, however, of even more importance than the degree of slope of the part. Great development of muscle in every direction is absolutely necessary at this part of the frame in every draft horse and the same statement applies to the thighs and quarters which should be similarly well supplied with muscle. The tail should be well set and carried, strong, well haired, free from sores and without tumors (melanosis) on under side and about anus.

Stiffles.—These joints should be strong, thick with muscle, free from dropsical swellings, showing plain indenta-

tions above and below the patella (knee cap) and properly set so that they are neither too close nor too far from the body when resting or in motion.

Gaskins.—What has been said of the forearm applies here but in examining this part (second thigh) care should be taken to determine that "thoro'pins" are not present as fluctuating enlargements noticeable at each side and running under the large tendons just above the point of the hock joint.

Hocks.—The draft horse has no more important joint than this and it is commonly the seat of many diseases or weaknesses. The hock (not "hind knee") has to withstand a tremendous amount of strain and should consequently be large in every direction, clean in all respects, free from meatiness, puffs, gumminess, bony growths such as spavins and soft distensions termed "bog" or "blood" spavins. The hock joint should look and feel hard, firm, its constituent bones severally detectable under the fingers, its skin fine, and its tendons and ligaments prominent and free from connective tissue. A "coarse" hock, given that appearance by the size and prominence of its bones, is the best hock so long as it is absolutely free from all of the other features of coarseness and unsoundness. It should be wide and deep, viewed from the front and side. Its point should be prominent, clean and sharp and the tendons under it straight, distinct but free from bulging.

INTERNATIONAL STOCK FARM



DAN PATCH BREAKING HIS RECORD.

TEN miles from Minneapolis M. W. Savage purchased 700 acres, and this is known as the International Stock Food Farm. It is finely situated along the banks of the Minnesota River, commanding a beautiful view up and down the valley. Here M. W. Savage has an ideal home. This farm was purchased with the view of making it one of the greatest stock farms in the country and of breeding better horses.

Regarding what is being done we use Mr. Savage's own report:

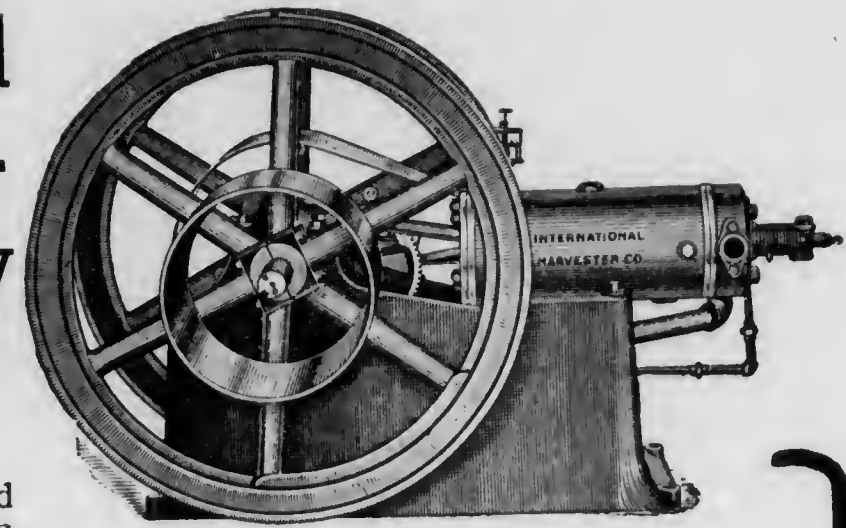
"I take a pardonable pride in this farm and in my Four World Famous Champion Stallions, Dan Patch 1.55 1/4, Cresceus 2.02 1/4, Directum 2.05 1/4 and Arion 2.07 3/4 because they are the four fastest and most famous harness stallions ever owned by one man or on one farm in the history of the world. Arion was sold for \$125,000 in 1893, Dan Patch sold for \$60,000 (\$180,000 has been refused for him), \$100,000 was offered for Cresceus and \$25,000 for Directum, a total of \$430,000 for the four stallions.

Many predictions of failure have been made in regard to my venture but I have always enjoyed doing things

that people believed could not be done. I am firmly convinced that Minnesota horses will become world famous and I expect to raise many horses, from my great sires and brood mares, that will be an honor to my farm and the state. I expect to raise a band of extra fine brood mares by Dan Patch, Cresceus, Directum and Arion, and then to cross these families as my judgment dictates.

My theory is that Dan Patch 1.55 1/4, Cresceus 2.02 1/4, Directum 2.05 1/4 and Arion 2.07 3/4 bred to producing mares will be sure to give a supply of colts inheriting extreme speed, gameness and good breeding. We are in a position to develop our colts and a prospective purchaser can see them worked for any length of time, on mile or half mile track, or he can purchase by mail on "My Cash Guarantee Plan" as to size, speed, breeding, soundness. Parties from a distance can purchase just as safely by correspondence as by a visit. Every horse or colt will be sold positively guaranteed to be exactly as represented. Money will be refunded or note returned promptly in any case where purchaser finds colt not exactly as described and this guarantee is as good as gold.

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It will cost you but 5c an hour to run an I. H. C. gasoline engine generating three horse power. The engine is always ready when you want it—right when you want it—you don't even need to light a fire to start it. Just close the switch, open the fuel valve and give the fly-wheel a turn by hand—that's all.

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INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U. S. A.
(INCORPORATED.)

Horse Breeding in the East

WRITTEN FOR BLOODED STOCK BY W. F. McSPARRAN, FURNESS, PA.

The other day at a nearby horse sale—possibly I might say of a job lot of horses picked up, traded for and bought by local live stock hucksters, a pair of good looking, strong work horses was sold for \$300. The buyer was a dealer who no doubt bought the pair with the intention and perhaps the prospect of selling again at a profit. Now, the judgment, like the word, of the average horse dealer, is not always implicitly to be relied upon. And perhaps the dealer made the mistake of paying too much; but if we assume that the horse deal-

er ever pays too much for his horse, we can safely conclude that the less shrewd farmer or other buyer does so, too. But it does not follow that this dealer did pay too much for this pair of horses, and knowing horse dealers, I conclude that he did not, and that he will sell or trade them to some "consumer"—very probably a farmer with more acres than he is farming either wisely or well—at a profit to aforesaid dealer.

The fact is, however, that the farmer buyer will finally own the horses "too dear." Now, again, \$300 for a

good pair of strong, well mated work horses is probably not too much for an alert farmer to pay, but it is quite enough, for that farmer is wasting money who is paying as much or more for any kind of live stock, or live stock feed, as he can produce it himself.

This particular pair of horses which I have taken for my text was sold as being nine and eleven years old, whereas local horse history has it recorded that they were eleven and seventeen years old, respectively. The

(Continued to page 14)



Johnstons Harvester at work in Holland. See Advertisement in this issue. Get their Catalogue.

HORSE RAISING FOR FARMERS

When the demand for an article greatly exceeds the supply, and prices have a decided upward tendency, then is the time to go in for production of that article, writes a practical man in the Country Gentleman.

Some weeks ago, in the Chicago livestock market, fancy draft horses sold at a new high figure, one lot averaging \$350 apiece, Armour & Co. paying \$1100 for a pair of Percherons. Why should we eastern farmers sit quietly by and let the chaps in the central west take our good money, when with a little trouble we could keep it ourselves? There was a time when the East was noted for its horses, and supplied the West almost entirely, but to-day farms where good horses are raised are few and far between. The general opinion seems to be that there is no money to be made in raising horses. There isn't any money in raising poor horses, or in raising poor stock of any kind. About three months ago, in Maine, a fine draft Clydesdale filly, 22 months old, was sold for \$175. In New York City a fine coach horse sold for \$400 last month. The prices for good horses of all classes are higher than ever, and the limit has not been reached.

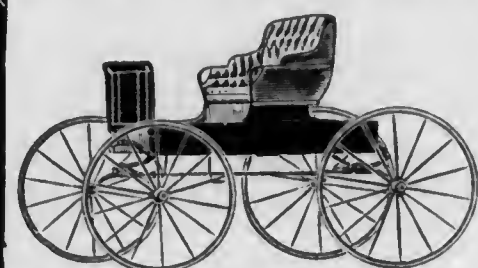
The first step in starting is to decide what kind of a horse best suits your location and what there is the most demand for. "As a general rule," said a well-known horseman, "the type of horse which sells best, as meeting most of the requirements for driving, working or riding, is a slightly modified and enlarged old-fashioned Morgan horse, with feet like iron, legs like steel, hair like silk, courage that never falters, and placidity that never degenerates into sluggishness. In color, perhaps bay; short back, with which has a little suggestion of the peacock's, and an eye that meets your gaze bravely; a collar seat which lovingly embraces the shoulders; a breast which protrudes like the prow of a schooner; legs wide enough apart to prevent their interfering and to give room for the inside leg muscles, strong enough firmly to attach the limbs to the body; so close ribbed that one will not continually be reminded of a slatted corn crib that can never be kept full, and yet not so close ribbed as to prevent long action, for it is evident that a short-bodied, very close-ribbed horse must be short-gaited; that symmetrical development of hind legs, rump and levers which can neither be fully described nor illustrated, but the symmetry of which the trained eye takes in at a glance, and the judgment approves because the propeller end of this complex machine gives evidence that it will make things move in this work-a-day world."

The problem is how to go about raising such horses. Experience, worth having, is surely worth paying for; so we must expect to meet with some failures, but don't let anything down you once get started.

Don't breed old, worn-out mares; if you do, you can count on failing before you start. Better results will be had by not working the brood mare too hard, if you want good, healthy, vigorous colts, because over-

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heating has a bad effect on the milk and will prove the ruin of the colt. Frequently good mares can be bought in cities at a moderate cost on account of sore feet, caused by the hard pavements. A few weeks in pasture with their shoes off will put them in good shape again.

A brood mare should be of good size and rather rangy. She will perhaps be a bit too long and coarse, but these defects may be corrected in the offspring through the sire. The eyes should be prominent, bright and well set; the head fine, neck rather thin and moderately oblique. The withers should be high rather than low; back (top line) may be long if the bottom line is correspondingly long, though a short back line and a long bottom line is best. The hind quarters should be broad and deep, with hips thrown well forward. A brood mare should be a little open-ribbed. Such a structure usually goes with a well-set tail, a broad pelvis and well-developed mammary glands.

Good, clean, well-knit legs, a bit short rather than too long, according to the breed, placed under the body, rather than on the "corners" of the horse. If the feet are dark-colored, tough and close of texture, they will, as a rule, not only be good, but will indicate that the rest of the body is also tough and close-grained. Bay or brown is a good serviceable color, and the hair should be thick and soft. In choosing the male, don't pick out one because he happens to be near at hand, but send the mare to a good breeder who has a stallion of the type you wish to raise. Do this even if the mare has to be shipped by rail. A better way, perhaps, would be to go to the city or town nearest to where the breeder lives, purchase a mare and take her out to the stud farm. Service fees usually run from \$25 to \$50. Be sure to select a stallion masculine in appearance; fine, large and smoother than the mare. Symmetry counts for a good deal in trying to breed up to a type.

If the mares are bred in the winter, they can be worked all summer,

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but should not be used on soft ground or muddy roads during the two last months with young. Care should also be taken not to drive them too fast or to overheat them. In this way colts may be raised every year, with little inconvenience. Mares will not breed so readily in the winter; but by increasing the feed, especially the grain ration, by regular exercise, blanketing and keeping the bowels free, conditions will be made similar to those which exist in the spring.

If more than one or two mares are to be bred, it will be economy of time to breed them as near together as possible, so that the colts will come together. The mares should be closely watched as the time for the birth of her young approaches. About one

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BLOODED STOCK for February.

BLOODED STOCK for February.

day prior to the birth of the foal, the waxy matter which closes the ends of the teats will loosen and allow the milk to escape. Be sure to give her a good roomy box stall, with a moderate supply of bedding. It will be safer to have a veterinarian on hand, unless you have had experience in such matters. Mares should be bred again nine days after foaling, if they are healthy and have not been injured in giving birth to their foal. They should be tried again within two weeks to eighteen days after service. Should the mare's milk not be sufficient for the colt, cow's milk, modified with a little water and sugar, may be used at a temperature of from 98 to 100 degrees. The first milk after birth has a laxative tendency, while modified milk tends to constipate the foal; therefore the bottle-fed foal should be given a mild physic, of 2 to 4 oz. of castor oil or unboiled linseed oil, when necessary.

Brood mares, when nursing their colts, should be fed much as cows are, for the production of milk. Plenty of carrots, ripe apples, potatoes and corn ensilage. The ration should be a narrow one if the stable is warm, but more corn should be given if the stable is cold. A good ration may be made up of bright mixed hay, 15 lbs., wheat bran, 4 lbs., oats, 5 lbs., carrots, potatoes and apples, 9 lbs.

Colts should also receive a narrow ration when they begin to eat—that is ration made up largely of bone and muscle-building foods, such as oats and bran. Wean the youngsters when they are three or four months old, if the mares are with foal again; if not, they may nurse longer. When the colts are a few days old, the mares may be led out of the stall for a few moments, gradually increasing the time of separation until they can be worked for two or three hours at a time. Never allow colts to follow their mothers when at work; they are sure to be in the way and are apt to get hurt.

Give the boys a chance to bring up the youngsters; it will create an interest for them, and as a rule, if they have a love for animals, they make good trainers. The cost of raising a colt to three years old amounts to about \$115, including service fee.

The question rises, should farmers try to raise good horses when they are already engaged in other branches of farming? Assuredly, even if they only raise enough for their own use. What greater pleasure can there be than driving behind a fine pair of horses of one's own raising? Besides, each new undertaking awakens new interest, broadens the vision and adds one more pleasure to life.

Good books on horses are to be had for little money, and will prove a great help in starting. Surely it is high time we were looking to our laurels, for while we sleep our western neighbors are carrying off our very reasons for being. To say that we can't compete with our friends is to admit that we lack pluck, skill and perseverance, and to admit such things condemns us as unfit to be farmers—free and our own masters.—From October issue of Blooded Stock.

Let us know if you want sample copies for the farmers' club meetings.

FEEDING HORSES.

Since the establishment of agricultural experiment stations the feeding of live stock has resulted in the compounding of balanced rations for all classes of animals. The dependance of the prosperity of many of the great industries is based on the use of horses, and the maintenance of these animals in good working condition has resulted in widely extended feeding operations.

As will be discovered, different quantities of the same kind of grain and hay enter the balanced ration of the different experiment stations. The fact that one particular ration is not universally adopted as the standard feed for work horses at work, or in the pens undergoing the grand finishing preparation for market demonstrates a wide difference in the individual temperament and assimilating ability of horses. There is a personality in each horse that must be understood and catered to in the maintenance of high condition when at work or during the fattening process.

Great corporations that employ a multitude of horses in conducting their business reduce their feeding operations to a system of so much grain and so many pounds of hay per hundred weight of the animal. But there is no uniformity even among the large feeding stables. The Virginia Express Company feeds 4.67 pounds of corn, 5.33 pounds of oats, 8 pounds of bran, 4.16 pounds of corn meal and 15 pounds of hay per thousand pounds of weight per day. The Jersey City Express Company feeds its horses 21.25 pounds of alfalfa, 3.2 pounds of corn, 19 pounds of oats, 1.15 pounds of bran and 9.5 pounds of hay per thousand weight per day. The Boston Express Company feeds its horses 12 pounds of corn, 5.25 pounds of oats and 20 pounds of hay. The United States Army feeds per thousand (Continued on page 16)

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How to Buy A Good Vehicle

And Save Money. Difference Between "Buckeyes" and "Crazy Quilts."

Intelligent farmers more than ever realize that the only legitimate price on vehicles is the manufacturers' price. Nobody cares to pay two or three profits on top of that.

But when you start out to buy at factory prices, you want to be sure you are dealing with a real manufacturer—one whomakes what he sells and sells only that which he makes.

Of the scores of concerns claiming to sell buggies direct to consumer very few indeed are manufacturers.

Here is where the farmer's ability to properly choose comes in. Some mail order houses buy from different factories the cheapest constructed vehicles possible—work no responsible factory would send out bearing the manufacturer's nameplate. This work is sold "direct" to the unsuspecting buyer who really pays two profits, the manufacturer's and the seller's.

Another class of concerns merely assemble parts of vehicles. They buy cheaply con-



structed wheels from one factory, bodies from another, tops from another, gears from another and so on. These inferior parts are assembled into a "crazy quilt" sort of a vehicle which does not carry with it the responsibility of the manufacturer. Buyers of "crazy quilt" vehicles also pay two profits—the manufacturer's and seller's.

But how shall the farmer discriminate between the square deal manufacturer and the fakir? How shall he safeguard himself? Before buying he should say to the one claiming to sell buggies at factory prices: "You must show me."

Now, the manufacturer of Buckeye vehicles is both willing and able to prove to your entire satisfaction that he sells buggies of his own manufacture only; that his factory is the largest and best equipped in the State of Ohio selling direct to consumers; that no other factory in the country selling direct to the user makes its own vehicle bodies; no other makes as many different parts of vehicles. The factory of the manufacturer of Buckeye buggies is not a mere myth—a catalog picture. It covers a city block, standing in brick and stone as a monument to standard materials, honest workmanship and square deal business methods. The manufacturer of Buckeye buggies is endorsed by a Cincinnati National Bank, a Cincinnati State Bank and the Bradstreet Commercial Agency, Cincinnati or New York offices. But what is more important, this manufacturer is endorsed by thousands of farmers throughout the United States, who for years have had business dealings with this concern direct, and whose testimonials will be gladly sent to any one interested.

Therefore, when you buy a Buckeye Buggy you are sure to get a bargain. You get a well constructed, strong, stylish buggy—a buggy carrying with it the manufacturer's name plate and responsibility; also the most liberal guaranty ever offered by a manufacturer; and as to price, you do not pay a profit to the jobber, to the dealer, or to the mail order fakir. You only pay the actual cost of economical manufacture, to which is added the fair profit of a responsible manufacturer.

The new "Buckeye Clipper" is the best and strongest buggy on the market for \$50, as well as the most stylish. It has many points of merit not usually found in vehicles sold for double the price. The manufacturer will build it to your order and guarantee to save you money. The special guaranty itself will convince you that the goods are right.

A postal card will bring you absolutely FREE a big, beautiful Book descriptive of 250 styles of Buckeye Vehicles and Harness. Address The Columbia Mfg. & Supply Co., No. 126 Summer St., Cincinnati, O.

HORSE BREEDING IN THE EAST

(Continued from page 11)
horses were well preserved. As a three-year-old one of these horses, upon my advice, was bought by a younger man at a farmer's closing-out sale for about \$85, and some of the fellows standing around marveled that so much should be paid for a young horse. That was several years ago, and evidently we may conclude that the horse that sold for \$85 then and is sold now for \$150 has accumulated value with his years.

Good, heavy, young horses, suitable for general farm uses are selling for \$200 to \$300 each. If one will go to the York or Lancaster, Pa., mule markets to buy a pair of "bang up" "cracker jack," well mated, well grown mules, he will have to divorce himself from the price of 700 or 800 bushels of wheat to bring the mules away.

It is not my intention to discuss in such a short paper as this is to be the question whether the horses or mules are worth to the buyer the prices he must pay for them, or whether the farmer can afford such purchases, but rather to insist that he has no right to systematically, or perhaps it were better to say, carelessly or thoughtlessly put himself in the position that obliges him to invest so heavily in his farm team.

Our city of Lancaster is a great market for farm horses and mules. I have tried in horse circles to get some dependable data as to how many are brought in to and sold there annually, but have not succeeded. I am not a very good guesser and shall not make a horse guess, but I am sure their value represents thousands upon thousands of dollars. Many of these horses are birds of passage, and many of them are "birds," in the slang sense of the word. They are sold for reasons. Many of them, of course, the most of them, no doubt, are legitimate horses of commerce, raised on pasture land and corn and hay land representing less farming value than the land of our more eastern sections; and sold to us here at prices considerably higher than the actual net returns of our own home acres justify.

A well grown, fairly well bred three-year-old horse of farm work ability, will cost now \$150; if very good and well bred, \$200. At the lower price he will represent \$50 for each year of his life. One must have a pretty good heifer that at two years old will sell for \$50, and our steer-feeding farmers think they are making money if they feed "a bunch" of steers nine or ten months and secure an advance of \$1.50 per hundred pounds (they very often have to put up with half of that advance) and will use considerably more feed in the nine or ten months per steer than a colt could use, if he would get it, in a year.

A good brood mare worked on the farm as horses are generally worked on our eastern farms, will do about as much work for eleven months of the year and produce a colt, if fed wisely and handled carefully, as she would do and not produce a colt.

We read and hear a great deal about our producing beef cattle and fattened beef on our eastern farms, and I

think every thoughtful farmer must be in accord with the idea. The east is going to make beef and pork well up to the demands of our best consuming trade, but certainly at this time the matter of producing our own horse supply presents a much more promising outlook.

But the demand is not for scrub horses nor for mongrels. An old rip of a mare bred to a horse of no breeding, no merit of prepotency, with no ancestors of worth behind him, cannot bring forth colts that shall grow up into horses for which men will bid against each other up to the high dollar.

We need good mares and the best stallions—not the \$5,000 or \$10,000 "company horses," but horses as good or better, at a portion of the price. We have the feeds and the markets. Our needs are for the blood and a willingness to produce the goods.

COST OF RAISING COLTS.

John E. Madden gives figures as a result of his experience on the cost of raising thoroughbred race horses: UNITED STATES DEPARTMENT OF AGRICULTURE.

Bureau of Animal Industry, Washington, D. C., Sept. 25, 1906.
Mr. John E. Madden, Hamburg Place, Lexington, Ky.:

Dear Sir:—As you are probably aware, I am collecting information concerning the comparative cost of raising horses for the market and for the race track. This information will be based on the statement of reliable breeders, and will, as far as possible, show the relative cost of raising roadsters, carriage horses, saddlers, standard breeds and thoroughbreds.

I would be greatly obliged if you could furnish me with a statement of the cost of raising a race horse up to the time he is placed in training, as shown by your experience.

This information is asked for simply because there is a dearth of it in our horse literature. The Department does not oppose the breeding for racing purposes, but indeed, believes that where farmers have light mares much benefit can be derived by the use of sound standard bred and thoroughbred sires of good conformation, size, quality and action. What we wish to know is whether such farmers should develop the offspring of such matings for the general market or for the race track.

There is
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but it requires above all **GOOD PASTURES AND MEADOWS.** How these can be obtained you will find fully described in our large, illustrated catalog. Whoever sows our carefully selected **Clover-Grass Mixtures** will double the yield of his pastures and meadows and he can keep again as many cattle on the same acreage. The grass and hay will be of the most nourishing and milk-producing quality. No matter what the nature of your soil and location you will obtain **luxuriant pasture or meadow** same year you sow the mixture. We are located in the best clover and grass seed producing section of the U. S. Nowhere are seeds of such high quality produced as at Faribault, Minn. We have the most complete stock of choice, re-cleaned **Clover, Timothy, Alfalfa, Bromus Intermis**, and other valuable Grass Seeds. For only 10c. we will mail you ten samples of Grass and Clover Seed, Millet, Rape, etc. We are growers of new, improved and pedigreed varieties of Seed Grain, Seed Corn, Seed Potatoes and Vegetable Seeds. Also Fruit Trees, Ornamental Shrubs and Small Fruit Plants. Write for free catalog. English or German.
FARMER SEED CO., Wm. Kueker, Mgr., Box 32, Faribault, Minn.

BLOODED STOCK for February.

Awaiting an early reply, I am very truly yours,

GEORGE M. ROMMEL,
Animal Husbandman.
Sheephead Bay, L. I.

October 10, 1906.

Mr. George M. Rommel, United States Department of Agriculture, Washington, D. C.:

Dear Sir:—In reply to your letter of September 25, not having my books to refer to, I cannot possibly furnish you with all the details you may desire, but the following statement of cost of raising a thoroughbred to

ALFALFA Best seed for sale. Write for samples, prices and FREE directions "32" on growing. J. E. WING & BROS., Box 32 Mechanicsburg, O., or Butaw, Alabama.

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Well rooted from strong healthy plants. Write for catalogue. **J. H. A. HUTCHISON**
Locust St. Greenhouses, OXFORD, PA.

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Large pkg. 100 sorts mixed for big bed of gorgeous bloom. Also Guide 100 new engravings, all about flowers. 3rd year. 50,000 pleased patrons. **GEO. W. PARK, Box 72, LaParo, Pa.**

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BLOODED STOCK for February.

the age of 2 years at Hamburg Place is fairly correct:

First year.....\$ 50
Second year..... 100
Keep of mare..... 50
Interest on cost of mare and allowance for barren years.. 50

Total\$250

My brood mares are select, and consequently high priced. Skilled labor only is employed and costly buildings used for shelter. The average farmer should be able to raise thoroughbreds for about \$100 less than the above figures, and I add a statement which may be useful in furnishing you the information you seek:

Pasture at \$2 a month.....\$ 16
Grain, with pasture at 10c a day 24
Cost of wintering \$6 month, 66
Estimate for stallion service, keep of mare and labor.... 50

Total\$156

Actual cost in feed and pasture should not exceed \$106. There is much latitude in the price of stallion fees—say from a free service to \$100—that it is difficult to make a correct estimate of this item. Many farmers could use their brood mares and so offset the cost of keep. An average price for a brood mare might be put at \$200. Where one or two mares are kept no extra labor is hired and I think \$50 would cover all expense beyond the above \$156.

The demand for hunting and steeplechase horses is very much on the increase, and the farmer is the man to supply this want in breeding a good type of thoroughbreds.

Would call your attention to a sale of brood mares. In 1903, being overstocked at Hamburg Place, I disposed of 38 head, which brought a total of \$14,626, an average price of a little over \$340 per head. In 1904 I disposed of 42 head, which brought \$11,595—an average price of \$276 per head. Seventy-five per cent. of these mares were in foal. Many foals the mares were carrying sold at public auction, while yearlings, at from \$400 to \$2200.

Brood mares have not been bringing their value during the past few years. Farmers who are struggling to make a living from the raising of crops could with but little extra help and expense keep a few brood mares and realize handsomely from the produce.

In 1905 the 55 yearlings of Hamburg Place, at public auction, sold at an average price of \$1,000 per head.

Yours, very truly,
JOHN E. MADDEN.

In the English wool trade the new year opens with values not only on a high level, but with textile conditions the best that the present generation of woolmen have ever known, according to the London Live Stock Journal. Throughout Yorkshire the mills are busy, and in many cases overtime is being worked. Other descriptions of raw material are also dear. This happy state of affairs is but the following-up process of the success which attended the industry all through 1906.

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A cream separator that is worth buying must give **long service**. To do that, it must be built strong and the **construction** must be simple. To have simple construction in a separator you must have a **Sharples Tubular**. There is no other cream separator made that will perform its work so well for so long a time as the **Tubular** because there is **no other separator so strongly built, or so simple in construction.**

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get all the cream, have low supply can, are easy to run, easy to clean, because there is only one little piece in the bowl to cleanse after each running, and the machine oils itself. It combines **Utility, Simplicity and Durability**. A glance at the pie-plate construction of most separators will give you a fair idea of what we mean by "simple construction" and "strength." For full information about the Sharples Tubular write for booklet E. 300.

Mr. R. Carpenter, Davenport, Wash., says "Having used a Sharples Cream Separator over sixteen years can say it is just fine."

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If you do not have a manure spreader write the American Harrow Co., Detroit, Mich., for information.

No More Blind Horses For Specific Ophthalmia, Moon Blindness and others Sore Eyes, **BARRY CO.,** Iowa City, Iowa, have a cure.

M. W. Savage, proprietor of the International Stock Food Co., has purchased the Angora Buck that captured the first premium at the Minnesota State Fair and also the Angora taking the second premium at the Minnesota State Fair. Mr. Savage has 75 Angora Does on his International Stock Food Farm, located a short distance from Minneapolis.

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Having sold one of our large farms at Lacona, preparatory to concentrating at Liverpool March 1st, we ought to sell at least 130 head before that date. We are offering special bargains and just now can supply you with anything in high-class Holsteins at lower prices than ever before, quality considered.

FEEDING HORSES

(Continued from page 13)

sand pounds of live weight its cavalry and artillery horses 12 pounds of oats and 14 pounds of hay, and its mules 9 pounds of oats and 14 pounds of hay. The Utah experiment station feeds its farm horses 25 pounds of alfalfa and 10 pounds of bran, or 22.8 pounds of timothy and 10 pounds of bran. The Wyoming station feeds 13.75 pounds of alfalfa and 2.25 pounds of straw per day. In Omaha, Neb., 15 pounds of oats and 12 pounds of hay is the standard ration for a draft horse. At Chicago the large companies feed 7.5 pounds of oats and 20 pounds of hay for a draft horse ration. At the Iowa experiment station a balanced ration is compounded in the proportion of 1 pound of hay and 1 pound of grain per one hundred pounds of live weight of the horses used in the experiment work.

The ration of maintenance in the above cases varies from the Wyoming combination of 13.75 pounds of alfalfa and 2.25 pounds of straw per day to the Iowa experiment station ration of 15 pounds of grain and 15 pounds of hay for a 1,500-pound draft animal. If horses can be maintained in good condition at work on such a widely different ration, it demonstrates a wide difference in the nutrition necessary to maintain horses in different localities. The wide variation in the ration of maintenance practically compels every owner of horses to conduct his feeding operations according to the individuality and assimilating ability of each horse in his stable. Some animals require more grain than others and an actual test will soon determine the proper amount of both grain and roughage requisite for each animal to maintain it in good condition or to fatten it for the market.—Drovers' Journal.

CARRIAGE HORSE BREEDING, FROM AN ENGLISH STANDPOINT.

It is a remarkable fact that, despite the great popularity of the motor car, carriage horses of good quality are as dear in price at the present time as ever they were, says a writer in the London Farm and Home. The prices ruling for big, upstanding harness horses suitable for carriage work are certainly remunerative to the breeder, and this class of horse is most saleable. The demand for carriage horses may not be very great—the number of people who keep a private carriage or jub one from the big jub masters being limited—but it remains continuous, and is in excess of the supply of the home bred article. Good carriage horses of the right stamp are anything but plentifully bred in this country. They are in fact, scarce, and a good many more than are now produced would find a ready sale. Moreover, the market for them is not by any means confined to this country, for there is not inconsiderable demand for English-bred carriage horses on the Continent. Continent dealers and agents are constantly buying up young horses of this class in York-

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BLACKLICK, OHIO, Oct. 20, 1905.
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I have used one of your No. 5 U. S. Cream Separators for the past 15 years and I have paid out only 50 cents for repairs in that time. I am using the machine every day and it is in good shape now. I would not have any other—only the U. S. Separator. I can cheerfully recommend the U. S. to all who want a good machine. SCOT RACHELL.

27 pictures with plain, easy-to-understand explanations in our new catalogue, make the construction and operation of the U. S. as plain as though the machine was before you. Let us send you a free copy. Just write: "Send Construction Catalogue No. 199". Write today. Don't buy a Cream Separator before you see this book.

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458
Eighteen distributing warehouses centrally located in the United States and Canada

shire, Lincolnshire, and in other countries, where light horses of the required type are raised. There foreign dealers attend the leading horse fairs and many auction sales, while they also largely buy the young horses direct off the breeders' farms. They pay big sums for a suitable stamp of £70 and £80 and upwards in to three figures. In the European capitals and other large towns, English carriage horses are much sought after by rich people, being preferred to those that are native-bred. As is generally known, a goodly number of the big harness horses that are suitable for carriage work are imported into England from abroad, owing to the insufficient supply of home-bred horses. Useful as these foreign animals may be, they cannot compare in point of quality with first-class English carriage horses, nor do they in any wise spoil the market for the latter or depress prices. The home-bred carriage horse stands in a class by itself, and commands a ready sale simply because it is English-bred. The breeder of this class of horse has nothing to fear from foreign competition.

Taking these various facts into consideration, there is no doubt that there is room for an extension in the breeding of carriage horses and that this stamp of horses can be profitably bred, provided they are raised on systematic and definite lines. To at-

tempt to breed carriage horses of the required type in a hap-hazard fashion, and without any definite method, can hardly prove profitable, simply because there is too large a proportion to misfits, and these misfits eat up what profits are derived from the sale at remunerative prices of those animals that come up to the requirement of the carriage market. It is in regard to this respect that so many horse-breeding farmers make a mistake. They breed their horses without any definite system nor have they any good idea as to the size of horse they should breed.

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VICTOR TRIPLE GEARED MILL
For grinding ear corn, small grain, etc., for stock feed on
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THE VICTOR FEED MILL CO., Springfield, Ohio

misfits, and they are only bred at a loss, besides taking up the room of more profitable stock on a farm.

The principal points which a typical carriage horse needs to possess are plenty of size and substance, combined with sufficient quality, a good length of body, a massive and imposing appearance, and satisfactory trotting action. The color is also a matter of some importance. This should be either bay or brown, these being the fashionable and sought after colors. The size should be, at any rate, not less than 16 hands, while it may with advantage be one or two inches more than this; they are liked as upstanding as possible. The breeder may easily breed them too small, but he cannot well get them too big. While size is a most essential requirement, there must be no legginess. The animal should possess a great deal of substance in order that they may have a massive and imposing appearance. The body must be both deep and wide, the breast being broad and muscular, and the ribs well sprung, while the back and loins should also be broad. The neck requires to be massive, and pretty broad, being well set on at its base. There is no need for the shoulder blades to be very sloping, as they need to be in hunters. In fact, comparatively upright shoulders do not constitute an actual fault in the typical harness horse, but, one the less, nicely sloping shoulder blades to be preferred. While the breeder must seek to obtain the maximum amount of substance and massiveness, he must be careful to avoid breeding the animals with undue coarseness. A carriage horse requires to possess sufficient quality, and must show some breeding. To obtain the right combination of plenty of substance and bigness with the necessary quality and breediness is certainly not an easy matter, and it represents, in fact, one of the principal difficulties which are experienced in breeding. It is often found when trying to get the requisite size and substance that the stock is bred too coarse, and instead of being of the carriage horse stamp the animals are of the light van horse type, and have to be sold as vanners. On the other hand, it is equally common experience that in aiming to avoid coarseness, and to obtain adequate quality and breeding, the stock is too light and weedy, and lacks the necessary substance and massiveness, thus failing to come up to the requirements of the carriage horse market, and having in consequence to be sold at unprofitable prices. Everything depends upon the breeding stock being selected with care and judgment and suitably mated. The action must be good, while the more showy and high-stepping it is the better. Showy trotting action is, it need hardly be said, considered to be one of the principal attractions of this class, and buyers are ready to pay for it. Pace is not of any importance, as carriage horses are not required to trot fast. It has already been said that bay and brown are the fashionable colors for carriage horses. The breeder should, therefore, aim at breeding his horses of either the one or the other of these two colors. Chestnut is not of course, an ineligible

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color, but it is not fashionable, and a horse of this color does not sell to such advantage as a bay or brown. White markings on the limbs are much disliked as a general rule, and considered to be objectionable in a carriage horse. It is for this reason advisable in breeding for the carriage horse market to avoid making use of the services of a stallion that has any extensive white markings on the legs, as this feature is apt to be transmitted to the progeny. The brood mares should, of course, also be whole colored if possible, and free from any or at any rate, from any conspicuous white markings on the legs.

Leslie D. Kline, Vancluse, Va., writing about his Durocs, says: Am so busy that I have not time for long letters or would give you more facts about the herd. Among the sows, however, I have Chief's Lady, by High Chief, he being a great winner by Ohio Chief, and now at the head of Mr. Watson's herd at Edinburg, Ind.; four sows by Golden Glen Chief, several by Sure Winner, Jr., and one by J. R.'s Sensation; also three close up to Longfellow and two by Go-Forward. I select them for size and finish with plenty of bone and from large litters. I feed little corn, but plenty of food rich in protein, and am seeking to handle them in such a manner that I will be able to improve the breeding qualities

rather than impair them as has been done with some of the other breeds by too heavy corn feeding.

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Sterling Lever Forge. Very neat and complete, with a round fire pan 18 inches in diameter, height 30 inches, fan 8 inches in diameter. This forge is especially adapted for farmers' or planters' use, or for light repairing and rivet heading. This forge has wrought pipe legs. The operating principle is a most positive and simple device; nothing about it to get out of order. Will produce a welding heat on inch iron in 5 minutes; just the tool for a farm and shop; weight, with shield, 65 lbs.

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INFLAMED JOINTS—DAMAGE BY OTHER ANIMALS.

Among animals there are many causes of inflamed joints—some from without and some from within—those from without being chiefly caused by violence, and those from within by the retention of waste products, which should have been eliminated by the excretories of the body—skin, kidneys, bowels, &c. In addition to these we have the worst of joint ills to cope with, from the invasion of micro-organisms, which may, or may not have entered at the affected joint.

As many joint injuries are inflicted by other animals, it may not be out of place here to remind farmers and other agisters, that they too often and too highly accept risks—they have no right to entertain by taking in horses without first insisting on the removal of their hind shoes, not but what a broken leg may result from a kick by an unshod hoof; the danger being, however, greatly increased by the shoe, and the agister has a bad defence, if called upon to make good the damage, when evidence is forthcoming that it was inflicted by a shod animal. Speaking of agisters, it is my experience that they are not sufficiently disposed to hold out for a fair price, while inclined to accept too great a number of horses.

A reputation for sending home cripples with a big round body, after pasturing out, is one that lasts, and with the right sort of people, while the hard-fisted bargainer for a low

price, remembers nothing but the wreck he received home, after a turn out. I know a man who had some water meadows on his farm, who makes a good sum every summer by taking in horses that have been fired and blistered, and otherwise in need of a turn out, who can charge his own price because all the veterinarians in the big city near him can confidently recommend his keeping and supervision. There are, of course, subjects for whose welfare, it is necessary to keep on shoes, but these must be otherwise provided for, not accepted by the agister in the hope that they will not kick other animals.

Often the only hope for a joint injury is a long turn out after the vet has done his best. I could point to several farm horses, the most useful in the team, that no town owner would have kept, or given a chance,

Durocs At A Bargain Spring Gilts and Fall Pigs

at prices to move them quick. They have size, quality and finish, and will make the buyer money. Write for prices. Mention Blooded Stock.

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Farmer's Sons WANTED with knowledge of farm stock and fair education to work in an office. \$60 a month with advancement, steady employment, must be honest and reliable. Branch offices of the association are being established in each state. Apply at once, giving full particulars. **THE VETERINARY SCIENCE ASSOCIATION, Dept. 12, London, Canada**

JERSEY REDS GET HEAVY FAST
It's "Pounds that count." Buy Jersey Red Pigs—the rapid growers. Strong, vigorous, small-boned, long-bodied. Nine months pigs often dress 300 lbs. Buy a pair now. Get quick profits. Circular Free.
A. J. COLLINS, Box A, Moorestown, N. J.

SOMERSET COUNTY HERD PRINCESS ANNE, MD.

Have some very fine O. I. C. pigs for sale; registered stock; prices reasonable; everyone guaranteed.

Would like to buy twelve Angora Goats.

GEO. NORMAN PUSEY

but the ever hopeful farmer, "not missing their keep," had given a prolonged trial to.

Injuries that result in "open joint" need very special treatment, and are not included in this purview; but of bruised, strained, or inflamed joints we may say, that no one stands in so good a position to cure them, as the occupier of the land.

When my farming friends go to town and bring home a horse with dropped soles, or incurable feet upon which they have made a tolerable shuffle; I wish instead that they had brought an obvious cripple that the town competitor would not have looked at.

The convex sole cannot be made concave again at grass, but the inflamed joint may be cooled, and the exercise required to get about in search of food will be just of the kind which will prove beneficial. I was taught the theory of providing surgical rest for an inflammation, but have learned from men who have been dubbed quacks, that rest means adhesions, and these mean permanent stiff joints—for men or beasts. This was brought home to me once in a shoeing forge. When a union man sprained his wrist with using the sledge hammer, he rested it in a sling, and was maintained by his club.

When the improvident one, with a beer score at the nearest saloon, and no club, met with a similar accident, he would put a strap on his wrist and strike on with clenched teeth, and suppressed oaths, and work himself sound in a third of the time the union man took to recover in. This applies even now to horses, with their well-known disposition to drop-sical joints and leg swellings, when not exercised. There are remedies on the market which have acquired much of their reputation because they do not require rest for the subjects upon which they are used. I do not wish to belittle the remedies, but point to the fact that much of the cure is due to the compulsory exercise, as with the blacksmith's wrist.

Joint suffering from concussion of stone roads, from strain and violence will be cured by nature, in most cases, if the turn out is long enough, but it does not pay to wait. A smart blister will do in a month as much as unaided nature in a year. It is after the blister that the deep moist grass will do so much in clearing up the products of inflammation, while the compulsory movements will prevent the adhesions previously alluded to.

Written for Blooded Stock by W. R. Gilbert, Alberta, Canada.

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS.

From Dec. 27th, 1906, to Jan. 16th, 1907. Unless otherwise mentioned, these records are for a period of seven consecutive days. They are made under the careful supervision of State Agricultural Colleges and Experiment Stations, and their accuracy is vouched for by them; no private records are reported by the Holstein-Friesian Association.

During the period from December 27th, 1906, to January 16th, 1907, records for 115 cows have been accepted; seven of which were begun more than eight months after freshening. All made seven-day, seven made fourteen-day, one made an eighteen-day, one a twenty-one-day, and seven made thirty-day records. The averages by ages were as follows:

THE JOHNSTON MOWER No. 10. "NOT IN THE TRUST"

Requires least trouble to operate of any mower on the market, is always ready for work. Runs smoothly, cuts a clean swath in light or heavy crop, on rough and smooth ground. The roller bearings and separate bushings, which do not run dry or heat, make this the lightest in draft and the easiest mower on man and team. More good mower features in this machine than in any other mower on the market.

In passing obstructions, turning corners, avoiding stones or working on uneven ground, the raising lever, aided by the foot lever, raises the bar easily to the necessary height and angle. Going

to and from the field the bar folds readily and is securely held in place. Mower is built high for power, and wide for balance and even draft.

The Johnston No. 10 Mower is fully described in our new 1907 Johnston Book, which we want to send free to every farmer who is interested in a new mower—the book describes also our complete line of tools for the farm, tools that every good farmer needs. Write for the book today.

The Johnston Harvester Co., Batavia, N. Y.

ty-day records. The averages by ages were as follows:

Twenty-six full aged cows averaged: age, 7 years, 8 months, 11 days; days from calving, 26; milk, 124.5 lbs.; per cent fat, 3.50; fat, 14.847 lbs. Seven senior four-year-olds averaged: age, 4 years, 9 months, 23 days; days from calving, 19; milk, 123.2 lbs.; per cent fat, 3.60; fat, 15.253 lbs. Ten junior four-year-olds averaged: age, 4 years, 1 month, 18 days; days from calving, 27; milk, 120.8 lbs.; per cent fat, 3.42; fat, 14.409 lbs. Eleven senior three-year-olds averaged: age, 3 years, 8 months, 27 days; days from calving, 34; milk, 138.1 lbs.; per cent fat, 3.41; fat, 13.170 lbs. Eight junior three-year-olds averaged: age, 3 years, 2 months, 18 days; days from calving, 20; milk, 145.8 lbs.; per cent fat, 3.30; fat, 11.417 lbs. Fifteen senior two-year-olds averaged: age, 2 years, 9 months, 1 day; days from calving, 32; milk, 124.7 lbs.; per cent fat, 3.37; fat, 10.950 lbs. Thirty-one junior two-year-olds averaged: age, 2 years, 2 months, 7 days; days from calving, 33; milk, 290.9 lbs.; per cent fat, 3.35; fat, 9.750 lbs.

This herd of 103 animals, of which just one-half were heifers with first or second calves, produced in seven consecutive days, 39,027.1 lbs. milk, containing 1,336.998 lbs. butter-fat; showing an average of 3.43 per cent fat. The average yield for each animal was 361.3 lbs. milk, containing 12.330 lbs. butter-fat, equivalent to 51.6 lbs., or 25 quarts, milk per day, and nearly 14-1/2 lbs. of the best creamery butter per week. Large as these averages are, they are below the average for H.-F. reports.

Aside from the breaking of the thirty-day butter-fat record in the junior four-year class, and the seven-day butter-fat record in the junior two-year class of the division for records begun not less than eight months after calving, there is nothing especially remarkable to report this issue.

Among the full aged cows, Maud DeKol, 20,449 lbs. fat from 561 lbs. milk, and Pontiac Jewel, 20,160 lbs. fat from 493.6 lbs. milk, with Tidy Pauline DeKol, 19,234 lbs. fat from 510 lbs. milk, very considerably above the eighteen-pound point. Maud Steinstra, with 17,232 lbs. fat, stands first in the senior four-year class.

Pontiac Columbo, 19,766 lbs. fat from 491.2 lbs. milk, and Pontiac Artis, 19,668 lbs. fat from 533.3 lbs. milk, are very close together at the head of the junior four-year-olds; while the latter with 80.94 lbs. fat in thirty days, breaks the record, and displaces Besie Hamilton 2nd, who gained the place last issue with 80.48 lbs. fat.

Pontiac DeKol, with 14.99 lbs. fat, leads the senior three-year class; Gerben Queen, 14.6 lbs. fat, the junior three-year class; and Friend Grace DeKol, 15.259 lbs. fat, the senior two-year class. The latter, with 61.109

lbs. fat, makes an even showing for the thirty-day record.

The record of Geneva Mercedes DeKol, 14,235 lbs. fat from 312.6 lbs. milk, is very notable among the junior two-year-olds; while Lady Pieterje Rue and Johanna Rue Lady Colantha both (Continued on page 23)



NEW DEERE No. 9 Edge Drop CORN PLANTER

Next after good seed and good soil is right planting. The extra 10 or 15 bushels to the acre that comes from an even stand is worth looking after. It means money back many times over on the cost of the best planter on earth on a single crop. The New Deere

Has The Drop THAT INSURES REGULARITY.

It counts the grains—95% absolute accuracy is its record as the result of a long series of tests. Every corn raiser is delighted with its simplicity and convenience. There are fewer parts and less working joints than any other planter. And it's

Always Ready For EITHER HILLING OR DRILLING.

Don't get the idea the old style planter you have been using so many years is the only one. Increased yield on same acres with same labor is what you are after. Investigate and see what using the New Deere No. 9 means. Handled by leading dealers everywhere.

Corn Book Free. The whole subject of selecting, preserving, curing and testing seed, as well as planting, treated in small size. The book for the man who is trying to double his corn crop. A postal brings it. Write for it now while you have it in mind.

DEERE & MANSUR CO.
MOLINE, ILL.

With the Business Man.

Business Points You Should Keep Posted
Upon. Means Money for You.

Rickety Fences Depreciate Farm Property.

"The clothes don't make the man—but they help," says an old proverb. Good fences don't increase fertility, but they make the market price higher. Take two farms—one properly fenced—the other with gaping holes for stock to rush through to the neighbors' fields; with tumble-down posts and dilapidated boards, half up—half down; which will you buy? Which will bring the most at a forced sale? Wise farmers are looking at all these outward appearances. They are discarding the old, decaying, profitless wooden fence. They are replacing it with one that is strong and durable like the Brown fence. This is a fence that farmers say is at least one-fourth heavier than most woven-wire fences; that it doesn't get "baggy or saggy"; that it is easily put up. One of the best things about a Brown fence is that it seldom needs repairs. It is so heavily galvanized, the wires are so solid and strong—being made of high carbon, hard coiled steel spring wire—that they cannot rust for years and will successfully resist all the varying changes of frost and sunshine. The uprights are the same size as the horizontals. When a Brown fence is up, it is up "to stay up."

Two more good things that the Brown Fence and Wire Company, Cleveland, Ohio, do for the farmer. 1st: They send a free sample of the fence so that every man can examine it at his leisure. He can hammer it, file it, dip it in acid, heat it—test it any way he chooses. The sample will be no better than the actual wire sent him when he pays his money. 2nd: They pay the freight on all orders of forty rods and over. This is a great convenience. A man knows exactly what his fence will cost laid down at his home station. Prepaid freight usually is delivered sooner than the "bill to follow" kind. A 56-page catalogue gives a detailed explanation of 133 different styles of fences for poultry, hogs, horses, bulls and stock of all kinds. It is sent free to anyone.

Hog Cholera.

Under this head will be found in another column the advertisement of the Dr. J. H. Snoddy Remedy Co., Alton, Ill., which has been appearing in our paper for quite a while. This remedy is doing a wonderful work for the hog raisers of the country. D. C. Steelman, Bargaintown, N. J., has cured his hogs of cholera recently. He then put another herd of hogs in and gave them the cholera and cured them, which rendered them immune to the disease, so he can feed them out in infected lots in safety.

E. W. Stegar, Howell, Christiana County, Ky., Route 1, has cured his hogs with this remedy of the worst outbreak of cholera, and has a number of sows that have farrowed right in the lot where the sick hogs were kept and their pigs were treated with the remedy and rendered immune and are now doing fine.

R. R. Ballantine, Jewel, Iowa, a breeder of fine Poland Chinas, has cured his hogs that have farrowed right after trying several other remedies that failed. Reports of cures are coming in daily.

Our farmers should write the Dr.

J. H. Snoddy Remedy Co., of Alton, Ill., for their free book on hog cholera and how to cure and protect their hogs against it. The book is free and will be sent to anyone sending his name and address, plainly written.

A Word to Our Readers.

Those of our readers who expect to purchase a vehicle of any kind in the near future should pay particular attention to the advertising of the Ohio Carriage Manufacturing Company which appears in this issue.

The Ohio Carriage Manufacturing Company are old and well-known advertisers, and have built up an immense business on their full line of Split Hickory Vehicles. They manufacture every style of vehicle, and can supply the needs of the most discriminating buyer. They also make a full line of Harness, and can furnish the best there is in that line.

This Company has earned a wide reputation for fair and liberal treatment of all its customers and has succeeded in making SPLIT HICKORY VEHICLES the best-known and most-liked Vehicles on the market.

Mr. H. C. Phelps, the President of the Ohio Carriage Manufacturing Company is a splendid type of the American business man, and makes a point of keeping in close personal touch with each individual buyer of Split Hickory Vehicles. He is making a particularly attractive offer at the present time—one that cannot fail to interest the most particular purchaser. He is also offering to send FREE to anyone who asks for it his Big Catalogue of Split Hickory Vehicles—and we strongly recommend anyone who is thinking of buying a vehicle of any kind in the near future to write for this book. It contains a lot of information valuable to the prospective purchaser.

Some idea of the size and completeness of this catalogue can be gained by the fact that it brings right into the home of the buyer—where he may carefully select at his leisure—descriptions and illustrations of a line of Vehicles equal to the stock carried by ten ordinary retail buggy dealers. If you are interested in Vehicles of any kind, this Big Book will be of immense value to you.

A Postal Card addressed to H. C. Phelps, President Ohio Carriage Manufacturing Company, Station 11, Cincinnati, Ohio, will bring it to you. Free. You should not fail to write for it.

The Great Berkshire Meet.

The first meeting of the American Berkshire Congress, commonly called the Berkshire Love Feast, was held at Kansas City in March, 1906, and attracted the largest number of leading breeders of Berkshire swine ever before assembled at a similar convention.

The program of the Kansas City meeting was worthy of the very complimentary recognition it received and

all its attendance voted the conference the most important and far reaching in its influence for good of any ever held by the breeders of Berkshire swine.

The uplift given to the better breeding of Berkshires as a result of the papers and discussions presented at the Kansas City meeting has had a marked effect in stimulating the breeders of Berkshires to adopt and follow much higher standards in the matter of form, better breeding, greater care and giving of more attention to all that tends to the future improvement in the up-to-date Berkshire.

The meeting at Kansas City encouraged not a few to make large and better exhibits at the late fairs, which gave 1906 the record for the largest exhibit of high class Berkshires ever shown in any previous season.

The most pronounced effect of the Kansas City conference followed the discussion of the generally conceded advantage of public sales and the very gratifying result gives the sale record to 1906, during which year nineteen public sales of Berkshires were held in six states.

The public sales of 1906 included 716 head that sold for \$69,168.00, making an unheard of average of \$96.60 per head.

The great momentum given to the advance movement of the Berkshire hosts by the first meeting of the American Berkshire Congress at Kansas City is sure to receive a far greater impetus by the second session to be held at Springfield, Ill., February 20-21, 1907.

The show and public sale of Berkshires to be held in connection with the coming session of the American Berkshire Congress will ensure the attendance of a large crowd of representative breeders from all sections of the United States and Canada.

The breeder, new or old, who has or expects to make any considerable investment in Berkshires and desires to keep up with the rapidly advancing procession has doubtless made up his mind to attend the meeting of the Congress at Springfield, February 20 and 21, 1907.

The progressive and enterprising breeder of Berkshires who has not completed his arrangements to attend the next session of the American Berkshire Congress at Springfield will decide to attend the convention after he has examined and duly considered the program of the meeting.

Send in your subscription at once.

Have You Money

TO INVEST

The Company that publishes Blooded Stock is growing faster than it has capital, and to increase the facilities they are offering investors capital stock of the Company at par.

This stock will draw interest. For further information address
BLOODED STOCK, Oxford, Pa.

Let Me Quote You A Price ON TIME (We Pay the Freight) On The AMERICAN Manure Spreader

We will send you the famous American Manure Spreader direct from our factory, because we've stopped selling this celebrated machine through jobbers and dealers. You save their profits now. You get the wholesale factory price on the best Spreader made—not a "cheap" Spreader, but the best one in the market.

I Don't ASK You to Send Cash
as we send you the American and you pay us on easy, liberal terms—letting the Spreader really pay for itself as it earns for you—after you've tried it free. You now get the American, recognized as by far the best Spreader, for no more than you must pay for an ordinary Spreader. It is the

Lightest Draft Spreader Made
That saves your horses. The machinery works only when you start it in your fields—is at rest as you drive out. That saves wear and tear on the Spreader. And you ought to use a Manure Spreader. An American Manure Spreader will make your manure cover more ground, your ground grow more crops, your crops bring more money, and it will make your land worth more dollars per acre.

The American has 40 per cent more exclusive features than any other Spreader. I want to tell you about them.



American Harrow Co., 3145 Hastings St., Detroit, Mich.

these practical exclusive features which make the American the only Spreader for you to buy at any price. The American is the Standard of the world. We allow

30 Days' FREE Trial

on every American Spreader made. We want every customer to see and try an American Spreader. We want every customer satisfied and to prove that our spreader is just as represented, therefore we say

Test It In Your Own Fields

If it is not just as represented you can return it. We pay all freight—BOTH ways—trial being FREE.

My low price is for the American Manure Spreader delivered at your station—freight paid—including free trial—giving you the dealer's and jobber's profits, and—

If Satisfied—Take Your Time Paying

for your American Manure Spreader. Now, I want you to know my low price and I want you to know all about the American Spreader.

Write Today for My Price

and I'll send it promptly. Also my free catalogue and booklet, which tell you all about the American Spreader and Fertilizing. You'll be interested in both. You'll be glad you wrote. A postal will do. Don't buy until you investigate this. Take your time investigating, but—WRITE TODAY.

W. W. Collier, Gen. Manager
American Harrow Co., 3145 Hastings St., Detroit, Mich.

Types and Breeds of Farm Animals.

A book by Charles Sumner Plumb, Professor of Animal Husbandry in the College of Agriculture of the Ohio State University, supplies the need for an up-to-date discussion of the several types and breeds of horses, asses, mules, cattle, sheep, goats, and swine. This volume describes the commonly accepted types, as, for example, draft or speed type of horse, dairy type of cattle, and bacon type of swine. It includes discussions of the original habitat, of breed development, European history, special American history, work of pioneer breeders, famous animals, families or tribes, breed characteristics, breed and individual records, as, for example, milk of cows, butter, or speed of horses, etc. Many noteworthy records are given and numerous illustrations of famous animals shown. A comprehensive table of contents and an index form an important part of the book.

The work is primarily intended for students in agricultural colleges and universities. Breeders and feeders of animals, however, will find this volume a valuable reference work. It contains 563 pages and will be mailed to anyone for \$2.20 by Glinn & Company, Publishers, New York.

Farmers and Gardeners.

The members of the Farmer Seed Co., of Faribault, Minnesota, whose ad appears in another column of this paper, are practical farmers and gardeners. They own extensive farm lands, and have been engaged in farming and seed growing the last 11 years at Faribault, Minnesota, a section that is renowned for the production of choice Seed Grain, Seed Corn and Seed Potatoes, and also for the growing of fine vegetables. Clover, Timothy and other Grass Seeds, produced in the neighborhood of Faribault, are unsurpassed for high quality, and for this reason the Farmer Seed Co. are headquarters for them. They give special attention to the growing of carefully selected Clover-Grass Mixtures for permanent pastures and meadows. The Farmer Seed Co. claim, and their customers prove it, that with their carefully selected Clover-Grass Mixtures, one can make 2 and 3 spears of Grass grow, where but one grew before. The readers of this paper, who are interested in farming and gardening, should write to the Farmer Seed Co. for their new illustrated catalog, which is a very attractive and instructive book. They offer it free to the readers of this paper. Write for it.

Free Subscription to the Large Illustrated Paper for Dairymen—The Separator News.

A big paper, handsomely illustrated in colors, entirely devoted to the success, prosperity and protection of separator users and intending purchasers. Every issue brimful of special illustrations and information—what might be called inside facts—that will help you to decide whether the cream separator will pay you, how large a separator you should have and how to care for a cream separator so as to get the most out of it. Articles guarding you against the "patent can" fraud and against the mistakes of buying a too cheap or a too complicated separator. Articles telling what State Experiment Stations say of cream separators. Articles comparing different kinds of cream separators. In fact, a whole paper devoted to cream separator news. Would you like to receive every future issue—without a cent of expense to you? Then write the publishers, The Sharples Separator Co., of West Chester, Pa., asking them to put your name on their mailing list. But don't forget to mention that you saw this offer in Blooded Stock.

Pedigreed Stock Co., Saratoga, Ind., has purchased two stock and poultry journals and will consolidate them in a paper for boys.

L. W. Wade, Wadesville, Ind., is offering for sale a fine lot of Duroc-Jerseys. Write him quick.

Cutaway Tools for Large Hay Crops

Three of Clark's Intense Cultivators produced this year 14 1-2 acres, 102 tons of well dried Alfalfa, Timothy & Redtop hay. If you want to know how



Read our program on page 3 for 1907 and send in your subscription at once.

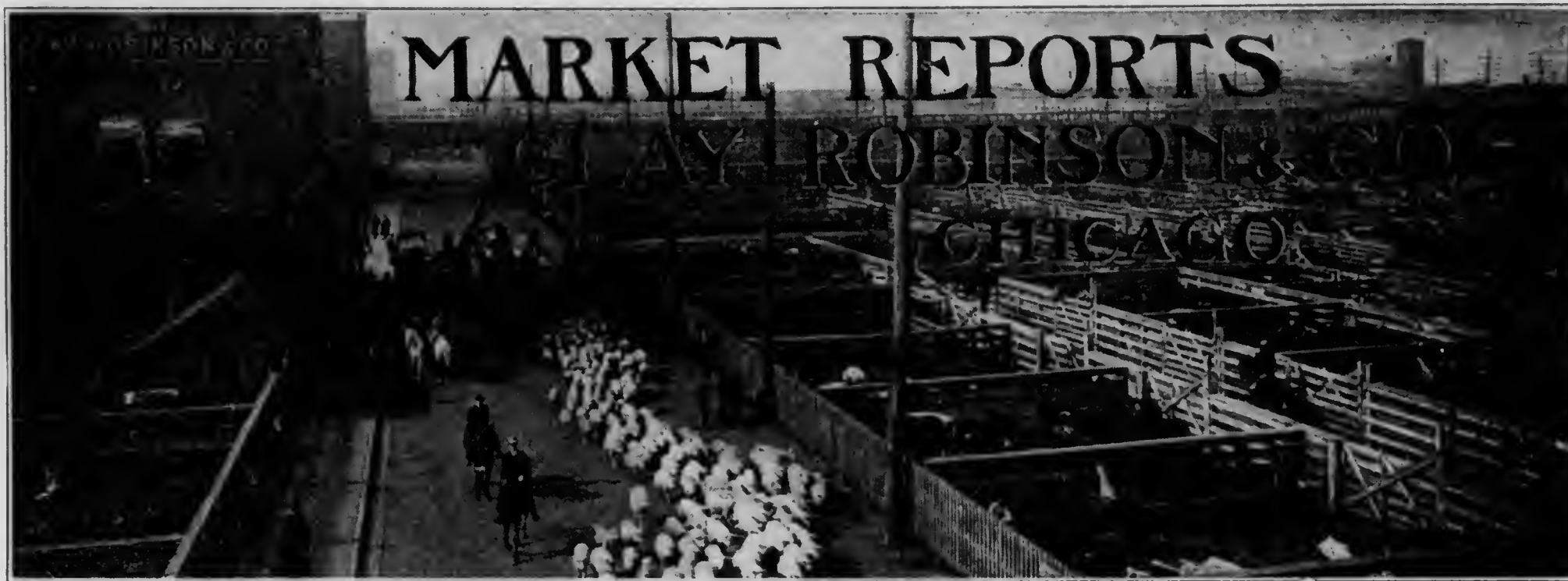
Your Name Will Get \$2 Eggs For 50 Cents Per Sitting

The White and Brown Leghorns are the greatest layers in the world. I keep 200 of the celebrated Chamberlain laying strain on my Experimental Farm, and to increase the sale of my Perfect Chick Feed, I will send to any one who will send me their name so I can send them my Perfect Chick Feed Catalogue, 2 sittings of Single Comb Brown or White Leghorn Eggs for \$1 for the 2 sittings. Only 3 sittings sold to one person. White or Barred Plymouth Rock, or White or Silver Laced Wyandotte Eggs \$1 per sitting. This is a rare chance to get a start of extra fine stock. Send money and have your orders booked at once.
W. F. CHAMBERLAIN, (The Perfect Chick Feed Man)
KIRKWOOD, MO.

JEWEL INCUBATOR

DO YOU WANT TO HATCH 400 CHICKENS WITHOUT INVESTING A CENT?

Name This Paper And Receive Beautiful Illustrated Poultry Book And Free Hatches Offer. HIGHEST CLASS MACHINE. BEST TESTIMONIALS. NO CASH, NOTE OR DEPOSIT. Address Mfr.—INTERNATIONAL STOCK FOOD CO., Minneapolis, Minn., U. S. A.



Receipts of cattle for January were 317,262, being an increase of 9,456 over the corresponding month last year. The market is easily 15c to 25c lower than a month ago. At the present time it requires a very fancy grade of steers to bring \$7.00, and there are comparatively few coming good enough to sell above \$6.50. For instance, to-day with 28,500 cattle on sale, top is \$6.75 and only three or four loads are quoted above \$6.50. Quality of the offerings for the past few weeks has been generally inferior, bulk of the supplies consisting of short-fed stuff. The feed lots throughout a considerable part of the corn belt were very muddy until this condition was changed by the recent cold snap and a good many feeders were compelled to ship out on that account. Then, too, corn is bringing a pretty good price and there are comparatively few feeders who have nerve enough to make their cattle strictly good under these circumstances. Those who have done so and who had the right kind of cattle to start with have made good money by so doing, as a few weeks' feed often puts on a finish that results in cattle bringing 40c to 50c per cwt. more than they would in an unfinished state. There has been an active demand from eastern shippers and exporters for prime heavy cattle and not enough of that kind coming to supply same. Shippers to Chicago will do well to have their heavy cattle here on Mondays and Wednesdays, as those are the days that the eastern buyers and exporters fill the bulk of their orders. There is a good market and wide demand, however, the other days of the week for all classes of dressed beef cattle, hence it is advisable to ship the lighter grades for those days and the heavy kind for Monday and Wednesday, thus resulting in a better distribution of receipts over the five market days of the week, which tends to prevent gluts and helps the trade all around.

There is active inquiry for good stockers and feeders, particularly the latter class of good weight suitable to put on feed and finish out for the spring market. Fancy selected stockers weighing from 1050 to 1150 lbs. are quoted at \$4.75 to \$5.00, good to choice feeders from 900 to 1100 lbs. at \$4.20 to \$4.75; good to fancy stockers from 600 to 850 lbs. at \$3.85 to \$4.60.

Receipts of hogs for January were 806,280, falling short of the preceding month by 92,112. The market has made a big advance during the past thirty days, present prices being fully half a dollar higher on most grades. The market at present time has excellent tone and we look to see present values pretty well maintained for the near future, although there will of course be fluctuations under varying receipts. Extreme top to-day was \$7.12½, while average cost of the droves was \$7.05, as against \$6.42 a month ago. Quality of the hogs is running very good at the present time and the range of prices is very narrow. To-day's top of \$7.12½ is the highest since May 5, 1903.

Receipts of sheep for January numbered 418,284, an increase of 48,362 over the preceding month. Compared with a month ago the market is a little lower. A month ago we were quoting choice fed western lambs up to \$7.75, while top to-day was \$7.65, paid for Colorados. However, there is no very marked change on any class. We are getting a good many fed Colorado lambs which are of excellent quality and meet with high favor at the hands of buyers, selling right up to prices paid for best natives. There is a marked scarcity of good feeding stock at the present time and active inquiry for both sheep and lambs. Choice feeding lambs are costing around \$6.75 to \$6.85, and a fair to good class at \$6.50 to \$6.60.

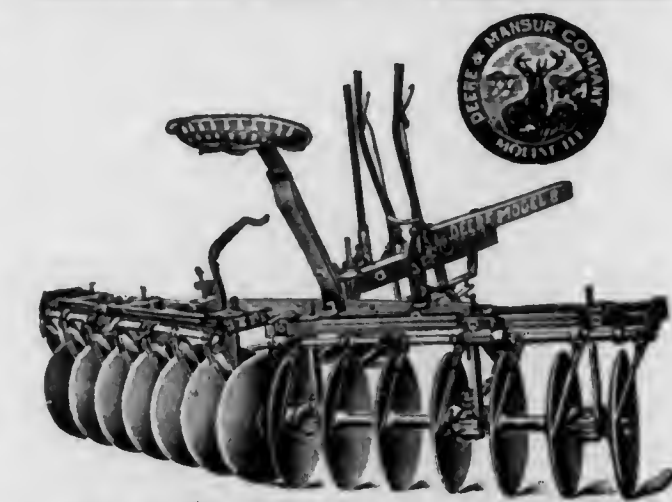
Anderton Vehicles.

"Try an Anderton with your money in your pocket" has come to be a familiar expression. It refers to the way of doing business of a valued advertising patron of this paper, The Anderton Mfg. Co., of Cincinnati, Ohio. The first one of this season's advertisements of the Company appears in this issue. The "Anderton" vehicles are not only superior but they are sold on what is unquestionably the most liberal plan ever adopted by a vehicle manufacturer. They sell only direct to the consumer. The prices are extremely low for the quality of vehicle. Their dealers are open and candid. There is no red tape and little formality in dealing with them. If you want any kind of vehicle look at this first and then put yourself in touch with them by writing for their catalog.

Alfalfa is now being grown very largely all over the United States and probably no one has done more to get good results from this crop than J. E. Wing & Bros. They have been writing for the farm papers for years on

this subject and now have put out a booklet on "How to Grow Alfalfa," which every one should have. Look up their seed adv in this issue. We have seen a sample of the seed they offer and it is first-class.

Your Wife or Daughter
Can drive your most fractious horse if he wears a Beery Bit. Horse is under perfect control at all times. Can be used on gentlest colt or runaway kickers with equal satisfaction. 10 days free trial. Prof. B. S. Beery, Pleasant Hill, O.



DEERE
Model B
The Only Disc Harrow
That is Flexible in Work.

Flexibility is an absolute necessity to a right working disc harrow. Any possible condition of soil is easily and instantly met by the operator. It's only a matter of setting a lever that's right at his hand.

We guarantee that the Deere Model B will cut out dead furrows and work over ridges more evenly, and cultivate more thoroughly the full length, than any other disc harrow made.

THE ONLY DISC FOR UNEVEN GROUND.

Gangs rise and fall independently, just as ground requires. No bumpers, therefore, no wide middles left standing. End thrust all taken up on frame and bearing boxes. Bearings always in oil which accounts for its well known light draft.

Its strength and durability, its high frame with ample clearance, high seat keeping operator out of dust, oscillating scraper, direct hitch with center draft and no down-pull on horses' necks, are other important features.

SEEDER ATTACHMENT.

If you want it. Two parts, one for each gang, with light working force—feet operated by wheels and chains from disc shafts. Also an excellent grass seed attachment.

Write and let us send you illustrated circular to give all particulars, then see your local dealer.

DEERE & MANSUR CO.
MOLINE, ILL.

(Continued from page 19)
exceeds 12 lbs. fat.
The records begun more than eight months after calving again show up well; and Tidy Pauline DeKol 2d, 11.363 lbs. fat from 255.6 lbs. milk, breaks all previous records made in the junior two-year class of this division. This heifer calved at the age of 2 years, 8 months, 7 days, and the record was begun 294 days after calving.
No one who has had any experience with H.-F. cattle doubt their staying powers; but sometimes a word from disinterested parties is interesting, and I will quote a few lines from a letter received by this office last summer, written under the date of June 29th by Prof. Erf, of the Kansas Agri. College, in regard to a pure bred H.-F. cow owned by that college: "She (the cow he writes of) has given in one year, from March, 1905, to March, 1906, nearly 16,000 lbs. of milk, the test ranging from 3.2 to 3.7 per cent. She is still giving twenty-five to thirty pounds of milk per day."

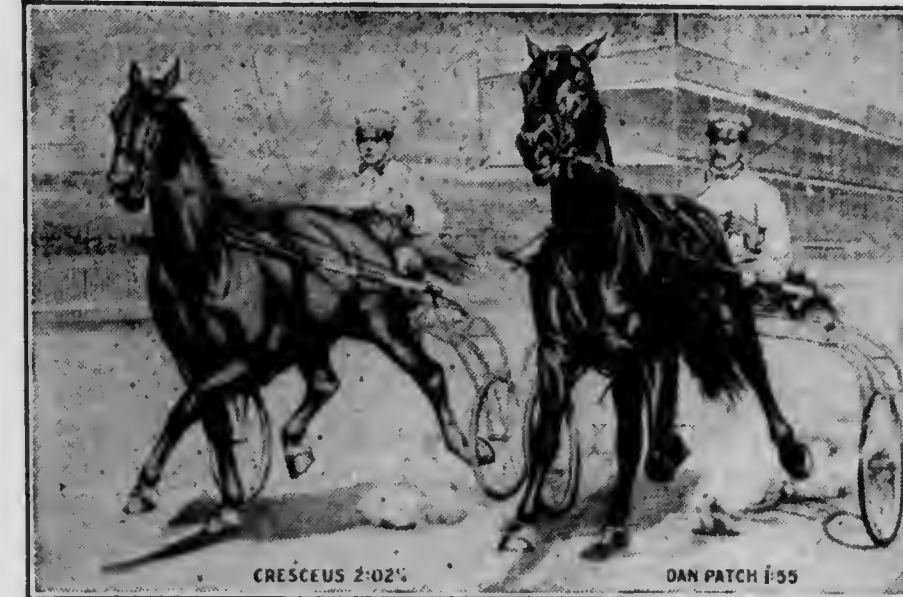
An Unusual Vehicle Offer.

Our readers who are thinking of buying a vehicle of any kind this season would be greatly interested in a large handsome book which we have before us, the 1907 catalog of the Anderton Manufacturing Company, of Cincinnati, Ohio. In looking over this catalog we are struck by the wide variety of vehicles shown, but more particularly by the unusual free trial offer which it contains. This company offers to send any vehicle illustrated and described in their catalog to any responsible party in the country without demanding a penny in advance or a deposit in any bank. In fact, their business motto is: "Try an Anderton with your money in your pocket," and they live up to this motto to the letter. There is no better way for a firm to prove the confidence they have in their own goods than by putting them out on an absolutely free trial basis, and in this respect The Anderton Manufacturing Company are certainly leaders. Another original way in which this reliable company protects its customers is by giving a Two Years' Approval Test with each vehicle, backing up this approval test with a \$25,000.00 bank bond. The catalog explains that this two years' test means practically two years free trial, for if any defects of workmanship or material develop in that time, which they cannot correct to the entire satisfaction of the customer, the vehicle may be returned and the full purchase price will be refunded. This firm has grown rapidly, owing to their liberal selling terms, and their policy of selling direct from factory to user, and their 1907 line of vehicles and harness is larger and better than ever. We are glad to call the attention of our readers to such a company and advise those who think of buying to send for their free catalog.

The 1907 Girl Yours for the Asking.

Have you made her acquaintance? Now is your only chance. After much trouble and expense, The Sharpless Separator Co., of West Chester, Pa., have succeeded beyond their hopes in reproducing from life, in the softest and daintiest colors, the sweetest dairy maid that ever graced a cream separator calendar or was ever offered by any cream separator company as a free picture suitable for framing. This calendar and this free picture are like the Sharpless Dairy Tubular Cream Separator—you can't appreciate either of them until you see them. Worthy a place in every home. The Sharpless Separator Co. will send the calendar with this picture on it to you, free, for the names of two neighbors who keep cows but have no Tubular Cream Separator. Or they will send free the same picture, made larger for framing and without the calendar pad attached, for the names of five neighbors who keep cows but have no Tubular Cream Separator. Calendar and picture both sent free for names of seven neighbors who keep cows but have no Tubular. Write at once before the supply is gone, sending two names for the calendar with smaller

CAN DAN PATCH PACE A MILE IN 1:54?



This Beautiful Picture
In 6 Brilliant Colors
Mailed To You Free.
Dan Patch 1:55, The Pacing King.
Cresceus 2:02½, The Trotting King.
We have Large, Colored Lithographs of our World Famous Champion Stallions, Dan Patch 1:55 and Cresceus 2:02½, in an Exciting Speed Contest. It is 16 by 21 inches and shows both horses as life-like as if you saw them racing. Mailed Free Postage Prepaid.
Write For This Picture.
1st, Name the paper in which you saw this offer. 2nd, State how much live stock you own.
International Stock Food Co.,
Minneapolis, Minn., U. S. A.

His Trainer Says Dan Will Astonish The World In 1907. Watch Leading Fairs.

FOR SALE OR EXCHANGE.

This department of advertising will enable readers to sell any kind of surplus, live stock, farm tools, machinery, crops, etc. Advertisements of farms for sale, rent, or exchange, poultry, supplies, dogs, cats, pet stock, implements, machinery, wagons, seeds, plants and vegetables. The cost of advertising is

WILL SOME ONE ANSWER?

Would you please tell me are chufas or ground almonds good for hogs and how many hogs can be fattened on one acre of same?—Chr. Hansen.

You can get a manure spreader on 30 days free trial from the American Harrow Co., Detroit, Mich. Write them at once.

The Canadian department of agriculture has followed out the plan of running a special seed train through Manitoba with great success. One of these trains recently made a long tour and was enthusiastically received at a number of points. The cars were well decorated with interesting exhibits of grains and a great number of farmers came to the meetings.

The Ohio Experiment Station, in Bulletin 169, gives the results of experiments in spraying for the San Jose scale, which show that the thorough use of a wash containing lime and sulphur only is an efficient remedy for checking the ravages of the pest.

The report of Secretary of Agriculture, Hon. James Wilson, for 1906, is out. It reviews the productions of the country, the work of the weather bureau, of the Bureau of Animal and Plant Industries, forest service, chemistry, soils, entomology, statistics, public roads, etc.

Forever and ever complaining that farming does not pay, and that it is hard work, etc., will drive the son from the farm, as it should. If you cannot do anything else, don't complain.—Live Stock Journal.

We want our readers to get a free trial of a manure spreader. Write the American Harrow Co., Detroit, Mich., and mention Blooded Stock.

Mention Blooded Stock when writing advertisers.

Only Two Cents a Word, all classified. Each initial or number counted as one word. No advertisement taken for less than 25 cents each issue. All replies must be sent direct to advertisers. Cash covering the exact number of words at 2 cents each must be sent with every order.

This Department for Live Stock Only.

CATTLE.

JERSEYS—Combination and Golden Lad. For sale—10 cows, 10 heifers and 20 bulls. S. E. NIVIN, Landenberg, Pa.

The "Dairy Calf from Birth to Profit"
Tells how to raise calves, cure their diseases, etc., by our best breeders. Just out. Introductory price 25 cents. C. I. HUNT, N. Y., Breeder of choice Registered Jerseys.

HOGS.

REGISTERED Duroc Stock of all ages for sale. Service Boars and bred Sows for Spring Farrow. 1 pay express. WM. HARSHMAN, Thurmont, Md.

Registered Duroc Pigs for sale. WALTER M. CARROLL, Box 106, Lynchburg, Va.

GET SOME Improved Large Yorkshire Pigs. Hundreds are glad they have these pure breeds. Price low. Money back if not satisfied. Write now. HARRY B. BILLINGTON, Wells, Minn.

MISCELLANEOUS

TEN PAIRS PIGEONS—I have 10 pairs fine Pigeons, mated. I will sell for \$1.00 per pair or the lot for \$7.50. Send quick. WILLIAM R. MORRISON, Oxford, Pa.

POULTRY

ROSE COMB Rhode Island Reds—Prize stock. Eggs \$2.00 per 15. D. C. HUTCHISON, Oxford, Pa.

WHITE and BARRED Plymouth Rock fowls and Mammoth Bronze Turkeys. R. H. McFADEN, Oxford, Pa.

Bantams—America's Best Sebright, Japanese, Polish Cochins, Games. Send 2c. stamp for circular. A. A. FENN, Box 16, Delavan, Wis.

Good Holsteins.

A year ago last spring, Mr. George Greenley, of Adams, N. Y., visited us, and bought a son of Pontiac Order, to place at the head of his herd of grades. Ordinarily, a cheaper bull would have been supposed good enough for such a purpose; but Mr. Greenley's idea was that if it pays to put a good bull at the head of a herd of pure-bred cattle, it would pay to get a good bull for grading up a herd, and it seems to be his policy, in purchasing, to select only the best.

Mr. Greenley, at that time, was quite interested in several of our most promising heifers, but concluded to wait a year before buying any. We might say, that one of the heifers he then had under consideration, has since made an official record of over 17 lbs. butter, at 2 years old, and her calf was purchased by Mr. H. A. Moyer at more than double the price that we had asked Mr. Greenley for the dam. We mention this, illustrating the change in value, which a single A. R. O. record may produce.

Last week, Mr. Greenley put into effect his promise of again visiting our herd, and the result of his latest inspection of our stock is the purchase of three exceptionally good heifers, two of them being among the best bred members of the herd, Pontiac Tiranua 2d, and Pietertje Inka Korn-dyke. The former is a daughter of De Kol 2d's Mutual Paul, and Pontiac Tiranua, one of our good Hengerveld De Kol daughters, that recently made an official record of 21.99 lbs. butter in 7 days, and over 87 lbs. in 30 days; and the latter, a daughter of Sir Korn-dyke Manor Pietertje Inka De Kol, with a 3-year-old record of over 19 lbs. butter in 7 days; her dam being Leila Pietertje, with a 27-lb. A. R. O. record, and a full sister to Aggie Witkop Inka, with an A. R. O. record of over 24 3/4 lbs. butter in 7 days. We believe the A. R. O. records of these two full sisters are larger than for any other two full sisters that the breed has produced. Both these heifers, Pontiac Tiranua 2d and Pietertje Inka Korn-dyke, have been bred to our King of the Pontiacs, so it will be seen that the calf from each will represent an extraordinary combination of the most popular and largest producing strains. It is seldom that a first purchase of pure-bred Holstein females includes animals of so high quality; and when it is further considered that both these heifers are, individually, extra good specimens of the breed, it will be seen that they are about as desirable a pair as could have been secured.

The other heifer purchased by Mr. Greenley is Plum De Kol Lass Daisy, a 3-year-old of unusual promise, bred in large producing lines, but not up in pedigree with the two we have mentioned, though her dam is a sister, on the sire's side to Hengerveld De Kol, De Kol Burke, Pietertje Alban De Kol, Pietertje Hengerveld's Count De Kol, and others of the great sons of De Kol 2d's Butter Boy. The dam is also a sister, on the dam's side, to the sire of Mr. Moyer's famous cow, Prilly; and is a full sister to Plum De Kol (A. R. O. 20.24 lbs.), dam of Ina Woodcrest De Kol, with an A. R. O. record of over 25 lbs. butter in 7 days.

Mr. Greenley is very much interested in dairy farming, and though still a young man, has succeeded in gaining an enviable reputation as one of the most progressive and reliable men in that part of Jefferson County, where his farm is located. We are glad to have him become interested in the breeding of pure-bred Holsteins, because men of his stamp cannot help but benefit any cause with which they become associated, and the Holstein Fraternity, we are sure, will be pleased to give him a cordial welcome.

The Vermont Farm Machine Co., Bellows Falls, Vt., writes us that they have a few thousands of their hand-some calendars remaining, and if the supply exceeds the requirements they shall be glad to send them to such of our readers as may ask for them—as long as they last. They will be obliged to limit the distribution solely to persons directly interested, namely:

farmers, dairymen and implement dealers, though it is safe to say that many of our readers already have received copies, in view of the wide distribution already made. Write them at

once for one of these handsome calendars.

J. M. Minor is offering a finely bred stallion for sale in this issue. Look up his adv.



15 Angus Bulls

As good as the Best
Must sell to make room
They are of the Cham-
pion Bull, Prince Ito
blood that sold for
\$9100 at auction

MEYER & SON

Bridgeville, Del

OUR GUERNSEYS WON AT ST. LOUIS

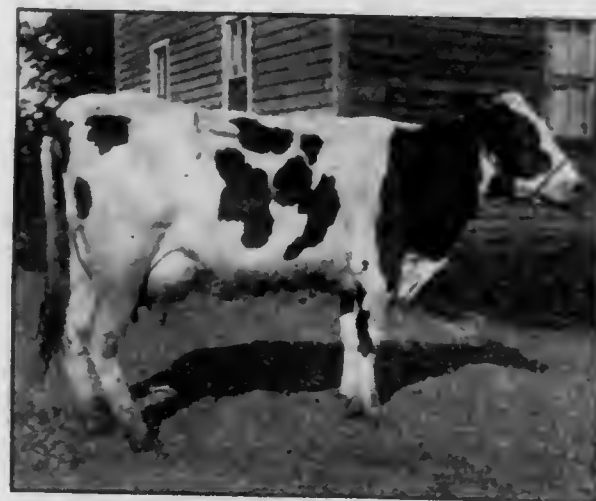
Do You Want a Bull Calf?

Our Herd
Has Made
RECORDS
in the
Show Ring



Write for detailed description. Our prices are reasonable
ALDORO FARM, Rosston, Pa.

350 Head of Holsteins to Choose From 350



PONTIAC CALYPSO

The cow shown in this picture is now giving over 80 lbs. milk a day, and for the past week has averaged over 4 per cent. butter-fat. This means an average production of over 4 lbs. (80 per cent.) butter a day. She is one of nine cows and heifers that we have had officially tested within the past two months, every one of which has made over 20 lbs. butter in a week, the highest record thus far being 28.2 lbs. The time has never been when a similar statement could be made of any other herd in the world. In a good many respects Brookside Herd is in the lead, and has been for a number of years. Records made in official test are the best proof of quality; we are having our cattle officially tested almost continuously, so the buyer from Brookside Herd stands a good chance to have the value of his purchase multiplied several times by the later records of animals closely related.

Write us just what you want, and let us tell you more about our herd and the cattle we have to offer.

THE STEVENS BROS.-HASTINGS COMPANY

Brookside Herd. Lacona, Oswego Co., N. Y.
FARM AT LACONA AND LIVERPOOL (NEAR SYRACUSE)

HOG CHOLERA

The Problem of a Cure is now Solved

Dr. J. H. Snoddy, of Alton, Ill., has discovered a positive cure and preventive for this terrible disease. He has had it in use for ten years and has saved millions of dollars' worth of cholera hogs for the public. The directions for its use are simple and easy to follow. Any practical farmer can stop the worst outbreaks of cholera that ever come and save every hog that is able to take the treatment.

The following breeders and well known hog raisers have tried the remedy and recommend it highly. T. T. Schouler, Supt, City Home Farm, Worcester, Mass; J. E. Hendrickson, Commission Merchants, Philadelphia, Pa. and Dr. David Alkire, of Marco, Ind., and many others.

Dr. Snoddy has published a small booklet that gives full directions and tells all about it. This little booklet will be mailed free to every person who will write for it. Every farmer and hog raiser should write at once for one of these little booklets. They are free, Address

THE SNODDY REMEDY Co., Box 290, ALTON, ILL.

THE CREAM SEPARATOR.

One of the most popular machines on the farm today is the hand cream-separator, and it is now predicted that, with the advent of the milking-machine, the power-separator will become equally popular. While the fact that the dairy is a sure and regular money-maker is well known and fully appreciated by many, it remains true that they have not engaged in dairying because of the necessary drudgery. With the advent of the hand-separator a large part of this drudgery was done away with and the dairy business has prospered. The demand for dairy products, however, continues unabated and will grow with the passing years. There is more money today in dairying than in any other branch of legitimate agriculture. Dairy products bring more money than any other farm products. Dairy products are manufactured articles made on the farm by farm help and of the rough farm materials. The dairy-farm produces a finished product of much higher value and vastly less cumbersome to handle than the bulky grains and grasses of which it is made. Very much of the success to which the modern dairy, especially the farm dairy, has attained is due directly to the popularity of the hand-separator, and this popularity has been gained by the high class of material and workmanship that has been put into it. Because of these qualities, the pioneer hand-separators, made by the Sharpless Separator Company, are even more popular than ever.

The Sharpless Separator Company has a very large number of its machines in use in Kansas and they are gaining in popularity every day. Its tubular system makes the machine so easy to clean and to work, and so effective in skimming that many farmers who compare it with other machines have no hesitancy in selecting the Sharpless. If your dealer does not sell the Sharpless, write to the factory at West Chester, Pa.

HOG CHOLERA.

This terrible disease is developing in many herds throughout the coun-

try in a virulent form. It will be good judgment on the part of the farmers and breeders to get their hogs clear of worms and in a good state of health and thrift, so they will be able to resist a slight exposure to the disease. When a hog is kept clear of worms and a good stock of blood there is not much danger of hog cholera striking such a hog unless he is very strongly exposed to the disease. Then it is to every one's interest to keep his hogs in the most perfect state of thrift possible. For putting hogs in perfect thrift and condition we know of nothing better than the Snoddy Remedy, manufactured by the Dr. J. H. Snoddy Remedy Co., of Alton, Ill. This remedy has stood the test, both as a thrift producer and cure for the disease.

Dr. Snoddy is being called for constantly throughout the country to treat some of the worst outbreaks that ever come. He never fails to stop the disease and restore the herd to thrift in a very few days' time. His last work was for D. C. Steeleman, of Pleasantville, New Jersey. Mr. Steeleman had lost forty hogs when Dr. Snoddy got there. He had 130 odd others, all more or less sick, and some very bad. Dr. Snoddy put the herd under treatment and had them in thrift and health in a few days' time, losing but one out of the entire lot. This is a marvelous success. He is now at this writing in the Northwest treating some very large herds for the Northwestern people.

Every farmer should make it a point to investigate this treatment. It is profitable to use for making your hogs thrifty and causing them to gain rapidly, even when there is no cholera around. After your hogs take the cholera the Snoddy Remedy is the only hope.

Write to the Dr. J. H. Snoddy Remedy Co., of Alton, Ill. They will mail you their book on hog cholera, which fully explains this remedy and how to use it, how to manage a herd of hogs. Just send your name and address to the company and they will send the book free.

Blooded Stock's program for 1907 will be worth money to you.

Sacred Cattle in Texas.

The so-called sacred cattle of India, which have recently been imported into Texas were shipped from Karachi with the sanction and under the careful watch of the United States Department of Agriculture. Most of the animals were bulls. Should the expectation of the imperviousness of their hides to ticks and also their breeding qualities be demonstrated, it is likely that other shipments of India live stock will follow.

If you can use sample copies at the farmers' club meetings write us and we will send them to you.

STALLION FOR SALE Standard Bred Trotting Stallion: beautiful bay, sure fold getter; perfectly sound and a beauty. Will sell cheap. **J. M. MINOR, Corinth, Ky.**

T. A. STEVENSON

Breeder and Shipper of

Aberdeen Angus

CATTLE

English Shire

HORSES

Chester White Swine, B

P. Rock Chickens, M. B. Turkeys.

R. F. D. No. 2, Shannon City, Iowa.

BLOOD WILL SELL



that sire, on all of which I can quote you attractive prices.

IN JERSEYS, I have young bulls, heifers and splendid calves. Prices low and qualities high.



W. F. McSPARRAN Furniss, Pa



The Secretaries Corner

The following associations held their annual meeting at International Live Stock Exposition and elected officers for the coming year, as follows:

Percheron Horses—President, H. C. McMillan, Cedar Rapids, Iowa; Vice-President, H. A. Briggs, Elkhorn, Wis.; Treasurer, J. L. Delancey, Northfield, Minn.; Secretary, George W. Stubblefield, Chicago; Assistant Secretary, A. W. Stewart, Chicago.

German Cows—President, A. B. Hobart, Greeley, Iowa; First Vice-President, G. Oltmanns, Watseka, Ill.; Second Vice-President, William E. Moore, Springfield, Ill.; Secretary, J. Crouch, Lafayette, Ind.; Treasurer, U. Popen, Esterline, S. D.

American Short Horns—Two new directors were chosen and three re-elected, viz: E. W. Bowen, Delphia, Ind., was elected to succeed C. E. Leonard and T. F. Flynn, Des Moines, Iowa, to succeed the late Martin Flynn, his father. Those re-elected to the board were F. W. Harding, Waukesha, Wis.; J. M. Forbes, Henry, Ill.; and Sam S. F. Lockridge, Greencastle, Ind. Secretary John W. Groves' annual report showed the association to be in a most prosperous condition. H. F. Brown, of Minnesota, is President.

Polled-Angus—President, George Stevenson, Jr., Waterville, Kan. Vice-President, W. J. Miller, Metz, Iowa; Secretary-Treasurer, Thomas McFarlane, Chicago, Ill. Directors for three years—L. H. Kerrick, Bloomington, Ill., re-elected; O. E. Bradfute, Cedarville, O., re-elected; W. J. Miller, Metz, Iowa, to succeed W. A. McHenry.

Polled Durhams—The three directors, F. S. Murray, of Mazon, Ill.; J. H. Miller, of Peru, Ind.; and J. H. Martz, of Greenville, O., were elected to succeed themselves as directors of the association. The present Secretary-Treasurer, F. S. Hines, who has served for five years, resigned and F. A. Murray was unanimously elected to fill his place. F. A. Murray then resigned his place as director and Mr. Wood, of Pendleton, Ind., was elected to fill his place.

Galloways—President, A. M. Thompson, of Nashua, Mo.; Secretary-Treasurer, Charles Gray, of Chicago; First Vice-President, S. M. Croft, Bluff City, Kan.; Second Vice-President, E. L. Davis, Davisburg, Mich.; Third Vice-President, C. S. Hechtner, Princeton, Ill.; Fourth Vice-President, W. C. Kimmel, Sheldon, Iowa. The new directors elected are G. W. Lindsey, Red Cloud, Neb.; J. C. Ewing, Youngstown, O.; David McCray, Guelph, Ont. The members of the Executive Committee are A. M. Thompson, T. E. Bales, Stockport, Iowa; Dr. G. M. Leslie, Fort Wayne, Ind.; J. C. Ewing and Robert B. Brown, of Carrollton, Mo.

American Poland China—H. E. Singleton, of Texas, President; J. W. Blackford, of Hillsboro, Iowa, Treasurer, and William M. McFadden, of Chicago, Secretary. The directors elected were Ed. Klever, Bloomingsburg, O.; John Harcourt, New Augusta, Ind.; J. N. Kemp, Kenney, Ill.; J. F. Diley, Rush Lake, Wis.; F. H. Wierke, Marion, Ia.; G. E. Leslie, Memphis, Mo.; H. E. Singleton, McKinney, Tex.; C. F. Dietrich, Richmond, Kan.; and P. W. Peterson, Vermillion, S. D. The nine directors elected were from nine different states and this serves to show how representative the meet-

ing was. Sixteen Vice-Presidents were elected, as follows: W. H. Tulley, Monte Vista, Col.; F. A. Dawley, Waldo, Kan.; J. W. Stewart, Jr., Sherman, Tex.; Howard Francis, New Lenox, Ill.; A. Glenn, Shepherdsville, Ky.; John M. Cox, Harlan, Iowa; W. E. Walker, St. Charles, Minn.; C. L. Taylor, Pokagen, Mich.; W. G. Tittsworth, Avoca, Iowa; M. W. Reed, Whitewater, Wis.; W. C. Welch, Harveysburg, O.; C. E. Pohue, Finley, Ill.; F. H. Graves, Belden, Neb.; Link Lukens, Disco, Ind.; S. A. Braa, Artesian, S. D.; and J. R. Young, Richards, Mo.

Berkshires—President, G. W. Jessup, Rockville, Ind.; Secretary, Frank S. Springer; Treasurer, B. W. Smith, and Auditor, Thomas Rees, all of Springfield, Ill., were re-elected and W. D. McTavish, Coggon, Iowa, was elected vice-president after a good natured contest in which an official count of the ballots was required. E. J. Barker, Thornstown, Ind., and J. W. Martin, of Wisconsin, were chosen as new directors, and N. H. Gentry, of Missouri; A. J. Lovejoy, of Illinois; George Prine and J. K. King, of Missouri, constitute the remainder of the board.

Southdown Sheep—President, W. H. Compton, Secretary, Frank S. Springer, of Springfield, Ill., and Treasurer, J. A. Leland, were all unanimously re-elected. Directors, W. H. Gibson, Ontario; George Telfer, Ontario; George McKerrrow, Wisconsin; W. B. Hamilton, New York; Arthur Sheets, West Virginia; C. S. Lyons, Kentucky; W. A. McCoy, Pennsylvania; S. E. Prather, Illinois; and R. C. Witt, Ohio.

Cotswold Sheep—President, T. Hardy, Shore, Glenworth, Ont.; Vice-President, D. B. Watt, Xenia, O.; Secretary and Treasurer, F. W. Harding, Waukesha, Wis.; directors, T. Hardy, Shore, Glenworth, Ont.; D. R. Watt, Xenia, O.; D. M. Crae, Guelph, Ont.; D. C. Lewis, Camp Point, Ill.; F. W. Harding, Waukesha, Wis.

Oxford Sheep—President, R. J. Stone, of Stonington, Illinois, and all the other old officers were re-elected.

Shropshire Sheep Breeders' Meeting.

The Shropshire Sheep Breeders' Association held their annual meeting during the International Show. Secretary Levering's report shows 225 new members were received during the

year, a total of 3,180 members, the largest membership of any Breeders' Association in America.

The income for the year, \$11,206.70. Certificates of registry for 1906, 17,542. Certificates of transfer for 1906, 3,302. Total Cwt. to Dec. 1, 1906, 243,754 the highest number in any Breeders' Association.

Re-elected officers—Pres., G. Howard Davison, Millbrook, New York; Vice-President, Richard Gibson, of Delaware, Ont.; Secretary-Treasurer, Mortimer Levering, of Chicago. The directors, whose terms expired this year, were re-elected. They were H. L. Wardwell, of New York, and Professor C. F. Curtiss, of Iowa State College.

Sheep breeding is coming into its own great popularity on the farm. All of the improved breeds of Europe have been introduced and all do well and with our abundant grass, good water and liberal feed, add increased prosperity in improved stock-breeding.

The mutton breeds have a great popularity. The Shropshire lead in the largest importations and largest breeding.

Sheep, more than ever before, with the good price of lambs, mutton and wool, are an important factor on our high-priced land to utilize the grass feed and forage on the farm.

Ayrshire Breeders Meet.

The Ayrshire breeders met at the New Bingham hotel, Philadelphia, Tuesday, December 18, with some forty men present. The officers elected were George M. Ballou, Middletown, N. Y., President; Obadiah Brown, Providence, R. I., Vice President; E. J. Fletcher, Greenfield, N. H., George H. McFadden, Bryn Mawr, Pa., William T. Wells, Newington, Conn., Vice Presidents; C. M. Winslow, Brandon, Vt., Secretary and Editor; N. S. Winsor, Greenville,

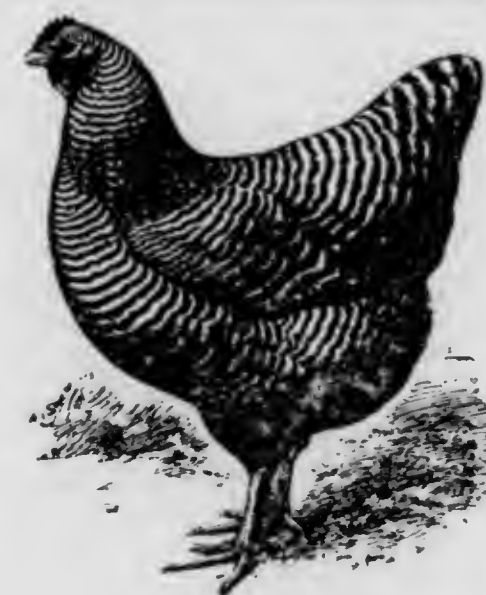
GRIDER'S FINE CATALOGUE 1907 tells all about pure-bred poultry and describes and illustrates 60 varieties, 10 beautiful natural color plates. Gives reasonable prices for stock and eggs; how to cure diseases, kill lice, make money. This valuable book only 10 cts. R. H. Greider, Rheems, Pa.

„BARRED PLYMOUTH ROCKS.” THE RINGLET STRAIN

600 FINE BREEDING AND EXHIBITION BIRDS for sale at reasonable prices. My winnings at the Western Maryland show, held at Cumberland, February, 1906, is proof that my Rocks are of the best, winning in a strong competition of 125 birds in class.

Winnings—1st, 2nd and 3d Cockerel; 1st, 2nd and 3d Pullets; 1st and 2nd Hen; 1st and 3d Pen. Write your wants and I will quote you prices.

HERMAN SHOCKEY, R. D. 1, Sand Patch, Pa.



R. L. Treasurer.

The trend of the discussion both in the afternoon meeting and in the Post Prandial exercises, after the banquet in the evening, seemed to be in favor of pushing the Ayrshire cow to the front as a dairy cow. She has made rapid strides of late through the influence of the Home Dairy test and Advanced Registry, bringing out several phenomenal producers, both in milk and butter production.

The Association was invited to a lunch the next day after the meeting at the farm of George McFadden, in Bryn Mawr, and visited the extensive herd of Mr. Percival Roberts, Jr., at Narbeth, a herd that showed great skill in selecting for purchase, a very uniform type of cattle, which presented a very showy appearance both in the long rows of white and when grouped in the yards adjoining the stable.

The herds of Mr. McFadden and Mr. Valentine showed great dairy ability at the fall, and their appearance was backed up by the official records in both herds.

A cow in Mr. Valentine's herd, holding the championship record for aged cows, and a four-year-old and a two-year-old in Mr. McFadden's herd holding the championship for their records.

The lunch at Mr. McFadden's was an event long to be remembered from its perfection in every way (quality and service)—C. M. Winslow, Brandon, Vt.

GROWING RAPE FOR PIGS.

I have ten brood sows that are due to farrow in March and April next. Most of the pigs I expect to fatten the following fall and winter and I want to know how to handle a rape crop properly. I have a 25-acre pasture, mostly woods and brush, with plenty of water and shall grow corn for feed later in the fall.—C. W. C.

Rape is one of the simplest crops grown and one of the most valuable for quite a variety of farm stock. For swine, sheep and poultry; it has no equal, but it must not be fed within three weeks of killing time. The soil and situation in Connecticut are all right and I would say treat the land in the way of cultivation as you would for a first-class crop of cabbage or turnips.

Of course, the more stable manure for use the more weeds you will get, but there is no better fertilizer in my way of thinking. The greatest success in growing the crop is attained by sowing in drills about a pound of seed to the acre, in rows just wide enough apart to work the scuffle hoe. Keep the weeds down till the crop covers the ground then it will care for itself. On the other hand you can sow the seed broadcast, mixing it with about four quarts of sand so that an even catch can be secured.

The feeding off can commence when the plants are some eight inches high. The best plan is to let the animals pasture it off, allowing them to feed about ten days, then shift them to the other half of the patch. The twenty-five acres of pasture which is mostly woods and brush mentioned by the correspondent is no pasture at all for hogs and the water would be of no account in its present condition as it would simply form a wallow, a most dangerous thing in a hog pasture. The proper thing to do is to give 50 pigs three acres of good, luxuriant grass, with an acre of rape at one side, parted across the middle, then the owner might say he had an ideal outfit. Have a trough of running water in the inclo-

sure and a very shallow plank bath tub in which the pigs can cool off. If the pasture gets up more than four inches high either put in more stock or go over with the mowing machine. Sow the seed as early in April as the soil will work. It does well sown very late in the fall.—N. E. Homestead.

The safest kind of a bull to buy to breed from today is the one least sought after. After bulls reach the age of three or four years no one seems to want them and they are sold at canner prices. A bull at this age should be a better animal to buy for breeding purposes, providing he has been properly fed, handled and exercised.

VETERINARY COURSE AT HOME.

\$1200 year and upwards can be made taking our Veterinary Course at home during spare time; taught in simplest English; Diploma granted; positions obtained for successful students; cost within reach of all; satisfaction guaranteed; particulars free. Ontario Veterinary Correspondence School, London, Can.

Headache

Want to know how to stop it? Of course you do—but you don't want to take anything that will injure you, or cause distress afterwards. Dr. Miles' Anti-Pain Pills relieve quickly; no bad after-effects; no nausea. Just a pleasurable sense of relief. It won't cost you much to try them. Every druggist sells them.

"I recommend Dr. Miles' Anti-Pain pills to sufferers of headache. They are the only thing I have ever found that would bring relief without affecting my heart."

ED FADER, Lakefield, Minn. If they fail to help, your druggist will refund the money on the first package.

25 doses, 25 cts. Never sold in bulk. MILES MEDICAL CO., Elkhart, Ind.

Send in your renewals promptly.

FOR SALE

Extra Fine This Fall

50 Poland-China Pigs 50

Sired by Ohio's noted hog Golden Rule, and out of splendid well bred matured sows. These pigs are extra fine and will be sold cheap if taken soon. Give me an order and see if I don't please. You can get winners for next years fair, and buying them small the express is light. Satisfaction Assured.

W. C. WELCH

Harveysburg, Warren Co., O.

STONE FARM BERKSHIRES

One Hundred Fall Pigs

Set of large prolific Sows, sired by Imported Lord Axa S. 64146, and sons of Masterpiece No. 77000, Lord Bremier No. 50001, Baron Bremier 3d 75021. Also offer twenty-five Yearling Sows, and thirty Spring Gilts, bred to the above Boars for Spring farrowing. Five Yearling Service Boars and twenty Spring Service Boars. Also a few unbred Spring Gilts. Orders filled promptly. We have over two hundred head to select from.

RICHARD H. STONE, Trumansburg, N. Y.

DUROCS of the Most Fashionable Breeding

Boars, Pigs and Sows

In pig to some of the greatest herd boars in the west. The quality is of the kind that will do the purchaser good. The prices are right. Our guarantee goes with every animal.

LESLIE D. KLINE, Vacluse, Va.

HOGS.

F. R. Marshall, Professor Animal Husbandry, A. & M. College, says the best possible start a young pig can have is the heritage of good ancestry. Judicious management may, in part, atone for its lack; injudicious management may in part nullify its influence, but good birth and good care make a combination which alone is safe to tie to in these days that bring hogs raised from all parts of the country to our common buyers through different points, making it possible for the more favorable climatic conditions of the southwest to aid in settling the price of the corn belt hog.

In many parts of the southwest it is still profitable to handle hogs somewhat the same as steers; that is, they are turned out and allowed to roam until they have attained sufficient size to be put up for fattening. This system gives a cheaply made animal, but does not argue that by the use of forage crops and exercise of more care,

DO YOU WANT CHESTER WHITES?

I have the kind that people buy, try breeding, then buy from somebody else, but after that they come back because the blood they secured from me still showed the best, because my stock was the best bred. Have some very good breeding stock for sale. Write me for what you want and tell me what I can do for you.

J. H. YARNALL, Jennersville, Pa.

CHAMPIONS CHESTER WHITES

Am sold out of Boars. Have two extra fine brood sows that I will sell. They are as good producers as I have on my place. Are bred and safe in pig and Iowa State Fair winners. Write at once.

J. H. MAHANNAH,
North English, - - - - - Iowa.



POLAND-CHINAS
of Best Strains

Growthy, lengthy gilts, good bone, coat and head and fancy ears. Sold bred or open. Priced to sell, as I need the room. Satisfaction guaranteed. (Also September Pigs.) Write for circulars and particulars to

A. F. SIEFHER
St. Charles Co., DEFIANCE, MISSOURI

Bargains in Poland- Chinas, Berkshires & Chester Whites



I now have a large stock of probably the best I ever owned. Cannot tell you all here, but I have Boars and Sows, all breeds, 2 to 6 months old, mated not akin; sows bred and boars ready for service. Guernsey Calves and Registered Scotch Collie Puppies. Write for prices and circulars. This stock must go and will be sold, M. B. Turkey, Barred and White P. Rocks, Brown Leghorns for sale.

P. F. HAMILTON, - Cochranville, Pa.

a greater number of hogs could not be so handled as to produce many times more profit from a fraction of the land.

With the spring farrowed pig to be converted into more money before Christmas, a day without gain in weight is a loss to the owner. The means of securing maximum gain at minimum cost will vary greatly. With hogs to be satisfactorily marketed at the above mentioned age, the best of pastures are not of themselves sufficient. To have the grain appetite well formed before weaning, the use of soaked shelled corn in a pen from which the larger animals are excluded, is a practice not to be debated. Such mill feeds as rice polish, wheat and oat shorts fed in a not too thin slop are excellent for young pigs, whether fed direct or through the suckling dam. Given a good alfalfa pasture and cheap corn a young pig will go on well. The cool, green feed is too bulky to render an additional thin slop advisable, but puts the system in such a condition that the entire nutriment of the corn is returned as gain. It is at about this stage that the troubles from worms are likely to manifest themselves. To any one familiar with the indications of worms it is a good investment to sacrifice one of the runty, dry-haired, pitiful looking ones that gets thinner each day, no matter how much they eat. The examination of the stomach of such a pig will impress the possibility of its being possible for a young pig to have within him worms of sufficient size and number to actually utilize the total digested substance, leaving the animal to literally starve. There are many good worm remedies on the market. The calomel and santone mixture is effective though somewhat troublesome to administer. Than worms there is no other trouble that does more to hinder growth and favor disease. In a large bunch of young hogs there are always a few that need to be put up by themselves until they are able to hold their own in the herd.

If pigs are to be marketed at eight months they may be allowed an acre of alfalfa to 15 or 20 head since the feed requisite for early maturing will preclude their grazing as extensively as they would if no grain were fed. For feeding on alfalfa pasture corn at a reasonable price is an excellent food. There is no time to first grow and then fatten a hog of spring farrow that is to make payments on the first of January; growth and fattening must go on simultaneously and these feeds combine well to supply the needs. On oats or sorghum pasture a larger allowance of grain is necessary and one that contains more elements of growth. Three four-acre pastures would be preferable to one twelve-acre pasture for raising a carload of hogs, since they can be changed from one lot to another so as to always have clear, fresh ground to run over, which is very important in any season and especially when disease exists in the vicinity. Just what effect the feeding of salt mixed through charred corn cobs has upon the system we do not know, but the growing pig likes it and if he can depend upon always finding a supply near the feeding ground will appreciate it, though not consuming large amounts. Soft coal allowed to soak in water a few days is also relished

BLOODED STOCK for February.

and probably answers the same purpose as the charcoal.

The amount of grain to be fed will be regulated by time at which it is desired to market. North Texas farmers who run fall farrowed pigs on winter wheat give from one to three ears of corn night and morning until the hogs weigh 150 pounds, at which time they are yarded for finishing. Others who finish on alfalfa in spring and early summer increase the grain and allow the hogs to pasture at will to within three or four days of shipping.

Sorghum, oats and wheat pasture are good and keep the system in fine condition, but do not produce the real gains that alfalfa and rape do. Rape, however, in the southwest, can not be relied upon for warm weather, but is an excellent winter pasture and will stand considerable frost if allowed to get a good start before cold weather comes.

The peanut crop is coming to be a very important one on light soils but should be regarded more as a finishing than as a forage crop. It is possible to have peanuts for the hogs to harvest from August to February and March. One acre of peanuts, the Alabama station says, will furnish food for 25 half-grown hogs one month.

In using this crop on a farm of diversified operations young hogs may

be kept on alfalfa and very light grain unless very early maturity is desired, until time to turn on peanuts. Then allowing them to run on the peanuts in small lots, preferably divided off by movable fences, the alfalfa may be cured and harvested for feeding to horses and cattle.

With the possible utilization of green crops and cheaply grown finishing crops, all produced on low-priced land, there is no section that can compete with the southwest for lowness of cost and safety of pork production.

The railroad officials are giving every encouragement to the improvement of agriculture and market stock, being the chief source of revenue of the railroads both the improvement and increased shipments will be promoted by half rates on pedigree stock, which would make fast friends of the railroads and every pedigree stock breeder and shipper. United action of all the breeders and breeders' associations will accomplish the desired result. Every breeder who favors half rates on pedigree stock is invited to write The Live Stock Journal, Hyde Park, Chicago, Ill.

Always mention Blooded Stock when writing advertisers.

U. S. Government inspected herd

Why lose profits breeding and feeding scrub hogs? Two of our O. I. C. hogs weighed 280 lbs. We are headquarters for breeders. Will send sample pair of our famous

O. I. C. HOGS on time, and give agency to first applicant. We are originators most extensive breeders and shippers of thoroughbred swine in the world. Write for circulars.

L. B. SILVER CO., 337 Caxton, Cleveland, Ohio.

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Primrose Herd Large English Yorkshires.

From Imported Stock. Second to none. Write wants.
A. A. BRADLEY,
Frewsburg, N. Y.

Chester Whites

Fall pigs, either sex. 2 choice spring Sows, one May Sow. Also a few white Plymouth Rocks.
JOS. T. FLEMING, R. 2, Belleville, Pa.

Raise 1000 Pound Hogs

Why lose profits breeding and feeding scrub hogs? Two of our O. I. C. hogs weighed 280 lbs. We are headquarters for breeders. Will send sample pair of our famous

O. I. C. HOGS

on time, and give agency to first applicant. We are originators most extensive breeders and shippers of thoroughbred swine in the world. Write for circulars.

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136-140 Water Street

We refer by permission to I. C. R. Assn., Penn Yan, N. Y., and the Editor of this Paper.

Directory of Breeders' Associations

The following list comprises the name of every live stock breeders' association in the United States, of which we have record. The name and address of secretary will also be found in every case. If any associations of this kind are not listed, we ask that secretaries notify us at once, and also notify us at once as to any change in names and addresses. It will be the intention to keep this list up to date, and we ask for the co-operation of secretaries to that end.

Cattle Breeders.

American Aberdeen-Angus Breeders' Association—Thomas McFarlane, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Branch Association of the North Holland Herd Book—N. F. Sluter, Brooklyn, N. Y., Secretary.
American Devon Cattle Club—L. P. Sisson, Newark, O., Secretary.
American Galloway Breeders' Association—Chas. Gray, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Guernsey Cattle Club—W. H. Caldwell, Peterboro, N. H., Secretary.
American Hereford Breeders' Association—C. R. Thomas, Stock Yards, Kansas City, Mo., Secretary.
American Jersey Cattle Club—J. J. Hemmingsway, New York, Secretary.
American Polled Durham Breeders' Association—Fletcher S. Hines, Indianapolis, Ind., Secretary.
American Short-Horn Breeders' Association—John W. Groves, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Sussex Breeders' Association—Overton Lea, Nashville, Tenn., Secretary.
Ayrshire Breeders' Association—C. M. Winslow, Brandon, Vt., Secretary.
Breeders' Association of French-Canadian Cattle of the United States—W. J. McMurdy, Binghamton, N. Y., Secretary.
Brown Swiss Cattle Breeders' Association—Chas. D. Nixon, Secretary, Owego, N. Y.
Dutch Belted Cattle Association of America—H. B. Richards, Easton, Pa., Secretary.
Holstein-Friesian Association of America—F. L. Houghton, Brattleboro, Vt., Secretary.
Maine State Jersey Cattle Association—N. R. Pike, Winthrop, Maine, Secretary.
National Polled Hereford Breeders' Association—A. E. White, Chicago, Secretary, 5629 Madison Ave.
American Polled Hereford Breeders' Association—Warren Gammon, Secretary, Des Moines, Iowa.
Red Polled Cattle Club of America (Incorporated)—Harley A. Martin, Gotham, Wisconsin, Secretary.
Shelby County Fine Stock Exchange, Harlan, Iowa. L. H. Packard, Sec'y.

Horse Breeders.

American Association of Importers and Breeders of Belgian Draft Horses—J. D. Connor, Jr., Wabash, Indiana, Secretary.
American Breeders' Association of Jacks and Jennets—J. W. Jones, Columbia, Tenn., Secretary.
American Clydesdale Association—R. B. Ogilvie, Union Stock Yards, Chicago, Secretary.
Percheron Society of America—Geo. W. Stubbins, Union Stock Yards, Chicago, Secretary.
The Percheron Roadster Co., Chas. C. Glenn, Columbus, Ohio, Secretary.
American Saddle Horse Breeders' Association—L. E. Nall, Louisville, Ky., Secretary.
American Shetland Pony Club—Mortimer Leveing, Lafayette, Indiana, Secretary.
American Shire Horse Breeders' Association—Charles Burgess, Wenona, Ill., Secretary.
American Stud Book (Thoroughbreds)—James E. Wheeler, N. Y., Registrar.
American Trotting Register Co.—W. H. Knight, Chicago, Secretary.
American Suffolk Horse Association—Alexander Galbraith, Janesville, Wis., Secretary.
Cleveland Bay Society of America—R. P. Stericker, West Orange, N. J., Secretary.
The French Coach Force Roadster Co., Mr. Chas. C. Glenn, Secretary, Columbus, Ohio.
French Coach Horse Society of America—Duncan E. Willett, 2112

Michigan Ave., Chicago, Secretary.
German Hanoverian and Oldenburg Coach Horse Breeders' Association—J. Crouch, Lafayette, Ind., Secretary.
Morgan Horse Register—Joseph Battel, Middlebury, Vt., Editor.
National French Draft Horse Association—C. E. Stubbs, Fairfield, Iowa, Secretary.
Oldenburg Coach Horse Association of America—C. E. Stubbs, Fairfield, Iowa, Secretary.

Sheep Breeders.

American and Delaine Merino Record Association—S. M. Cleaver, Delaware, O., Secretary.
Black-Top Spanish Merino Sheep Breeders' Publishing Association—R. P. Berry, Clokey, Pa., Secretary.
Franco-American Merino Sheep Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.
Improved Black-Top Delaine Merino Sheep Breeders' Association—O. M. Robertson, Eaton Rapids, Mich., Secretary.
Interstate and International Polled Dickinson Register—H. G. McDowell, Canton, O., Secretary.
Michigan Merino Sheep Breeders' Association—E. N. Ball, Hamburg, Mich., Secretary.
National Delaine Merino Sheep Breeders' Association—John B. McClelland, Chambersburg, Pa., Secretary.
National Merino Sheep Register Association—R. O. Logan, California, Mich., Secretary.
Standard American Merino Sheep Breeders' Association—John P. Ray, Hemlock, N. Y., Secretary.
United States Merino Sheep Registry Association—J. A. B. Walker, Mount Airy, Pa., Secretary.
Vermont Merino Sheep Breeders' Association—C. A. Chapman, Ferrisburg, Vt., Secretary.
New York State American Merino Sheep Breeders' Association—J. Horatio Earll, Skaneateles, N. Y., Secretary.
Continental Dorset Club—Joseph E. Wing, Mechanicsburg, O., Secretary.
Dorset Horn Breeders' Association

A GREAT HOLSTEIN BULL.

Since the recent sale at Syracuse of the highly bred Holstein bull "The Milk and Butter King," for the record price of \$10,000, added interest attaches to him and his near relatives. He was sired by Aaggie Cornucopia Johanna Lad (the latter being out of the world record cow, Aaggie Cornucopia Pauline, 34.5 lbs. butter in seven days.)

We herewith present the picture of another young bull also sired by Aaggie



Sarcastic Cornucopia Johanna Lad 38550
Aaggie Cornucopia Johanna Lad, namely, Sarcastic Cornucopia Johanna Lad, 38550, who is out of an Advanced Registry cow also. The photo was taken when he was seven months old. He is owned by W. C. Cruser, Montrose, Pa., whose herd of about a dozen purebred Holsteins he heads. His calves are all that could be desired, being large, handsomely marked fellows. Mr. Cruser is offering some fine stock for sale.

Send in your renewals promptly.

of America—M. A. Cooper, Washington, Pa., Secretary.
American Cheviot Sheep Society—F. E. Dawley, Fayetteville, N. Y., Secretary.
American Cotswold Association—Frank W. Harding, Waukesha, Wis., Secretary.
American Leicester Breeders' Association—A. J. Temple, Cameron, Ill., Secretary.
American Oxford Down Association—W. A. Shafor, Hamilton, O., Secretary.

American Rambouillet Sheep-Breeders' Association—Dwight Lincoln, Milford Center, O., Secretary.
American Shropshire Registry Association—Mortimer Levering, Lafayette, Ind., Secretary.
National Shropshire Record Association—S. J. Weber, Middleville, Mich.
Hampshire Down Breeders' Association of America—C. A. Tyler, Nottawa, Mich., Secretary.
The International Lincoln Society—H. A. Daniels, Clio, Michigan, Sec'y.
National Lincoln Sheep-Breeders' Association—Bert Smith, Charlotte, Mich., Secretary.
Dickinson Record Co.—H. G. McDowell, Canton, O., Secretary.
Standard Delaine Spanish Merino Sheep-Breeders' Association—S. M. American Southdown Breeders' Association—Frank S. Springer, Springfield, Ill., Secretary.
American Suffolk Flock Registry Association—George W. Franklin, Des Moines, Iowa, Secretary.
American Tunis Sheep-Breeders' Association—Charles Roundtree, Crawfordville, Ind., Secretary.
International von Homeyer Rambouillet Club—E. M. Moore, Orchard Lake, Mich., Secretary.
American Angora Goat Breeders' Association—John W. Fulton, Kansas City, Mo., Secretary.
American Milch Goat Record Association—W. A. Shafor, Hamilton, O., Secretary.

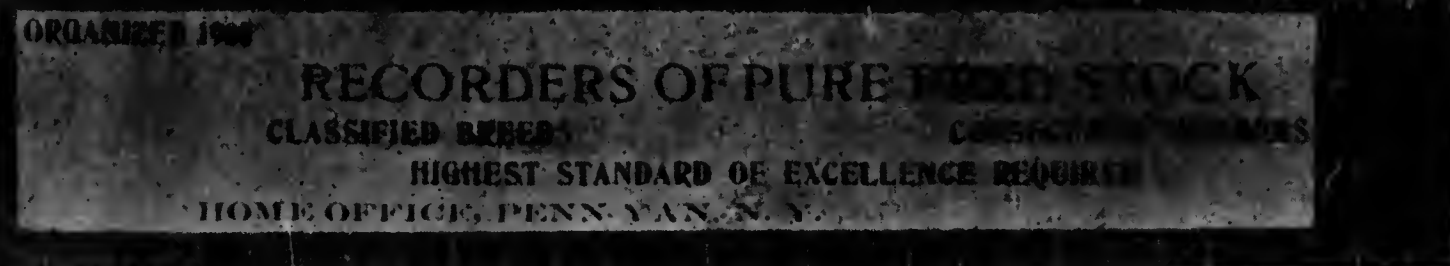
Swine Breeders.

Improved Small Yorkshire Club of America—F. B. Stewart, Espeyville, Pa., Secretary.
National Berkshire Record Association—E. K. Morris, Indianapolis, Ind., Secretary.
National Chester White Record Association—Thomas Sharpless, West Chester, Pa., Secretary.
National Duroc-Jersey Record Association—H. C. Sheldon, 604 Main St., Peoria, Illinois, Secretary.
O. I. C. Swine Breeders' Association—C. M. Hiles, Cleveland, O., Secretary.
Southwestern Poland-China Record Association—H. P. Wilson, Gadsden, Tenn., Secretary.
Standard Chester White Record Association—W. H. Morris, Indianapolis, Ind., Secretary.
Standard Poland-China Record Co.—George F. Woodworth, Maryville, Mo., Secretary.
United States Small Yorkshire Association—D. T. Bascom, California, Mich., Secretary.
Victoria Swine-Breeders' Association—H. Davis, Dyer, Ind., Secretary.
American Chester White Record Association, Earnest Freigau, Dayton, Ohio, Secretary.
American Berkshire Association—Frank S. Springer, Springfield, Ill., Secretary.
American Duroc-Jersey Swine Breeders' Association—S. E. Morton, Camden, O., Secretary.
American Essex Association—F. M. Stout, McLean, Ill., Secretary.
American Poland-China Record Co.—W. M. McEadden, Pedigree Record Building, Union Stock Yards, Chicago, Secretary.
American Tamworth Swine Record Association—E. N. Ball, Hamburg, Mich., Secretary.
American Hampshire (Thin-Rind) Swine Record Association—E. C. Stone, Armstrong, Ill., Secretary.
American Yorkshire Club—H. G. Krum, White Bear Lake, Minn., Secretary.
National Poland-China Record Co.—A. M. Brown, Winchester, Ind., Secretary.
International Record Association Co.—H. A. Jones, Penn Yan, N. Y., Secretary. International for all breeds and countries.
Cheshire Swine Breeders' Association—Ed. S. Hill, Peruville, N. Y., Secretary.



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Pet Stock.
BREEDERS' SUPPLIES.

FOUNDATION STOCK SUPPLIED
from
Representative Herds
Prices in keeping
with
Quality.
Manufacturers
International
Tattoo Marking Tool,
Patented Jan. 3, '00
Tattoo Inks and Dies.
Personal
Property Marking and
REGISTRY DEVICE.
The Only Impregna-
ble System for
ABSOLUTE
IDENTIFICATION
of All Animals or
Personal Property.



TO BLOODED STOCK

January 1st, 1907.

READERS AND ADVERTISERS—

Gentlemen: We have been before you with a proposition since July, 1906, in our advertisement, telling you that we wanted at once two good reliable men in each County to represent us before the people and to tell them what we can do for you and them.

We must urge you on to "Be Quick" now and take advantage of this proposition and accept our Grand Holiday Proposal, viz:

The First Two Applicants for Membership from each County in the United States will be given to the Breeder who will do just a few hours work for Us; and will send us in his Applications for Registry Under Our System, should he find that it will be to his advantage to do so after he has read over our entire printed instructions, which will be sent to him on application, and sure to mention that he saw this Notice in January No.

It is no matter what others may tell you about this Plan of Our Work. You Have a Right and Privilege to Know the Truth of Our Work for Yourself. It is also your privilege to Think and Act for Yourself.

Should you already be a member of Some Single Breed Organization and you would like to make a change to ours We Will Be Glad to Have You Do So. Please name the one you are in and we will be glad to purchase your interest in it for an equal interest in this Association and will help you to have all of the stock you now have Comprising Your Ancestral Herd from which you are now breeding, Transferred Free to You in Our Records. Then You Will Know what you are paying out your money for.

Do not Delay Sending in Your Application at Once and Secure This Offer. We want Just a Few Hours of Your Time to Read Over Such Printed Matter We Send You and for You to Talk It Over With Some of Your Friends Afterward. No Other Conditions Unless You Wish to Accept Further Offers, Which You Will Be Only too Glad to Accept as Soon as You Know What They Are.

You are Invited Into Full Privilege Membership With any Good Clean Work. Should You Have Stock That is Barred by Age You Need Us Badly.

We can help you as we have thousands of others and as we will thousands more. Our New Tattoo Dies Will Soon be Ready to Send Out and You Will Have Full notice of Same Through This Paper—Blooded Stock and You Should be Together Always. Just let us know what we can do for you and we will show you plainly how we do it.

Our Advertisement Will Still Continue as Below Until Every County is Duly Represented By Our County Supervisor Who Has Duly Qualified. We Also Want Several State Representatives and Organizers. What will you do about it?

WANTED AT ONCE

Two good reliable men in each county of the United States to devote one to three months each year to our business.

A STRAIGHT BUSINESS PROPOSITION—The only one of its kind in existence. We register all kinds of animals.

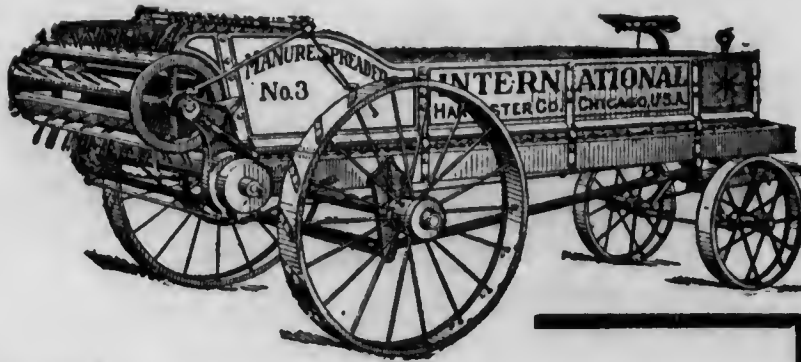
LOWEST FEES

BEST SERVICE

Car fare and expenses will be allowed the right parties coming here to investigate our business and receive instructions when satisfactory arrangements have been made. Write us fully stating your present occupation and experience with live stock. ADDRESS

International Consolidated Record Association
Penn Yan, New York

These Are Facts It Pays To Remember When You Buy a Manure Spreader.



I. H. C. SPREADERS—Corn King and Cloverleaf—one lever controls every operation. Operator can remain seated from time he leaves the barnyard until he returns.

Self-adjusting, vibrating rake levels the load and brings the manure up squarely to the cylinder.

Cylinder is large and runs easily, and the teeth are long, square, high carbon steel.

Apron is equipped with three sets of rollers attached to slats, running on steel tracks. Is driven from both sides and cannot bind.

Apron drive clutch is automatically thrown out of gear when load is fed out and again when apron has returned. No attention required.

Range of feed is three to thirty tons per acre with ten speeds.

Ends of apron slats are protected so that no manure can work in and bind or clog the apron.

Driving axle is extra large—made of cold-rolled steel.

Front axle is attached to frame by means of ball and socket joint.

Chain drive, direct from rear axle to cylinder, gives easy transmission of power.

The wheels are steel with staggered spokes. Both rear wheels are fitted with lugs, affording ample traction in wet or frozen fields.

Seat is hinged so it can be turned forward and kept clean while loading.

Box is attached to frame by means of heavy steel cleats.

Frame is made of carefully selected lumber re-enforced at corners by metal braces.

That's a good deal to say of a manure spreader, and yet that is by no means all you should know about I. H. C. Corn King and Cloverleaf Spreaders before you buy.

Those are the main points, and they are sufficient to indicate the superiority of the I. H. C. line. They tell you not to buy a spreader until you have seen the Corn King and Cloverleaf Spreaders.

The key-note in the I. H. C. line is strength and simplicity of construction. Strength in every part means much, for a manure spreader has hard work to do. Simple construction means that it will not get out of order, that it will have light draft and be easily operated. Those are the things you want in a manure spreader.

I. H. C. spreaders are made in two styles, Cloverleaf, an Endless Apron machine, and Corn King, a Return Apron machine; each is made in three sizes.

Call on the Local Agent or write for catalogues.

INTERNATIONAL HARVESTER COMPANY OF AMERICA, Chicago, U. S. A.
(INCORPORATED)

THE MOST PROFITABLE COW.

The cow that gives the largest mess of milk is not always the most profitable one in the herd. The herd man who accomplishes an extraordinary amount of work in a brief period of time and then fails to enjoy another such period for a long time never is of much value to himself or anyone else as the steady, persistent worker who accomplishes a reasonable amount of work in a given period of time and then keeps right at it all the time. This is true with the cow. She is hired to work for her owner and she should be expected to do a reasonable amount of work. It is not what she can perform in a week or month that determines her value. It is what she is liable to do in a year or lifetime. The cow has the advantage over the hired man on the average farm. She can fail to do her work for her owner and he is quite likely to know nothing about it. She may even give a very large mess of very poor milk for a short period and he will be convinced that she is one of the best cows on the farm. She will later cut down the quantity and he forgets to keep account of that period when she gave the large amount. Keeping steadily at a thing usually produces the best results, and many of our best dairy cows are those which do not give the large amount for a brief period but give a fair quantity and keep it up for a long time.—Southwestern Agriculturist.

Find out by weighing and testing milk what our cows are doing, then increase the food and give better care, weigh and test again; then the cows may be found susceptible to improvement and they will respond most readily to better care.—H.-F. Register.

Many New England horse breeders have already mapped out their

plans for 1907 and some of them have already decided upon the stallions with which they will mate their best mares. Appearances indicate an increasing interest among breeders, and it seems probable that a greater number of foals will be produced in 1908 than in 1907. Men who own first-class stallions and keep them before the public will undoubtedly get plenty of business for their horses.

A GOOD DAIRY COMBINATION.

The cow and sow are surely a great combination when handled right. The quickest, easiest and keep-coming money maker is a good cow, and then when you can keep just over in the next lot a good sow with seven or eight lusty pigs, calling for all the skim-milk you can give them, it surely is easy money. More farms today are making milk and pork their main products than ever before. Where the milk is skimmed at home, and the fresh, sweet milk fed to the pigs, there is the best opportunity in the world for making cheap pork. Experiment stations claim that skim-milk is worth feeding from 20 to 25 cents per hundred. It is worth much more than if we take into consideration the boost it gives the pigs just at the right time. Work the combination—sow and cow. They will pay well for you.

BACON A CHEAP FOOD.

In his recent investigations and careful analysis Prof. Snyder, of the Minnesota Station, places bacon high on the list for food. He says withal it is very digestible. He says it should be cut very thin and fried to a crisp. It is high in protein. Prof. Snyder says:

"Lean bacon contains as much protein and about twice as much digest-

ible fat as other meats, making it at the same time and even at a higher price per pound a cheaper food than other meats. Bacon fat is easily digested and when combined with other foods it appears to exert a favorable mechanical action upon digestion."

Many a good young bull is ruined by over-service when turned with cows at pasture, but by keeping him up the amount of service can be easily regulated, and in this way the best results are obtained.

The time to buy a good animal, either male or female, is when you find it. The man who delays buying for a few months, having in mind the saving of a small amount of feed, is "penny wise and pound foolish."

It will pay you to build a special shed under which to keep your manure that is taken from the barns. If it is thrown in a heap out of doors it will lose much of its value as a fertilizer.

WANTED 10 men in each state to travel, distribute samples of our goods and tack advertising signs. Salary \$91 per month \$3 per day for expenses. SAUNDERS CO., Dep. F, Jackson Blvd., Chicago

FOR SALE O. I. C. males. I will offer for the next 60 days O. I. C. males good enough to head any herd. 4 and 5 months old for \$10 and \$12. Pedigree will be furnished. Satisfaction fully guaranteed. **SANFORD ROYER** Ridgeway, O

POLAND CHINAS

A bred sow means 6 to 12 Poland Chinas eligible to registry all for the price of one. Bred to Perfection I. the Inter-State Fair Winner.

MEADOW BROOK FARM, Salt Lick, Ky

**End of
Volume**